

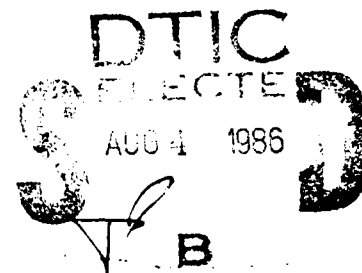
AD-A170 613

2

NPS55-86-013

# NAVAL POSTGRADUATE SCHOOL

Monterey, California



TECHNICAL

THE SOVIET THEORY OF REFLEXIVE CONTROL IN  
HISTORICAL AND PSYCHOCULTURAL PERSPECTIVE:  
A PRELIMINARY STUDY

by

Diane Chotikul

July 1986

Approved for public release; distribution unlimited.

Prepared for:  
C3CM Joint Test Force  
Kirtland Air Force Base, NM 87117

DTIC FILE COPY


NAVAL POSTGRADUATE SCHOOL  
MONTEREY, CALIFORNIA

Rear Admiral R. H. Shumaker  
Superintendent

D. A. Schradly  
Provost

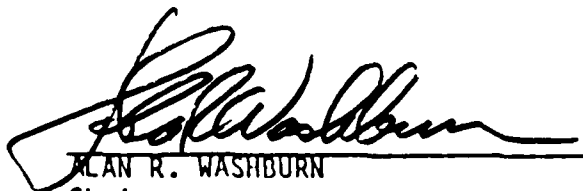
Reproduction of all or part of this report is authorized.

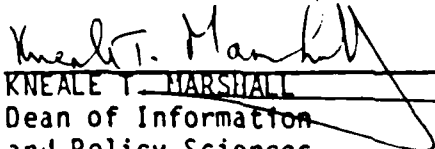
This report was prepared for C<sup>3</sup>CM Joint Test Force by:

  
Diane Chotikul  
Research Technician  
Department of Operations Research

Reviewed by:

Released by:

  
ALAN R. WASHBURN  
Chairman  
Department of Operations Research

  
KNEALE T. MARSHALL  
Dean of Information  
and Policy Sciences

## REPORT DOCUMENTATION PAGE

1a. REPORT SECURITY CLASSIFICATION <b>UNCLASSIFIED</b>			1b. RESTRICTIVE MARKINGS		
2a. SECURITY CLASSIFICATION AUTHORITY			3. DISTRIBUTION/AVAILABILITY OF REPORT Approved for public release; distribution unlimited.		
2b. DECLASSIFICATION/DOWNGRADING SCHEDULE			5. MONITORING ORGANIZATION REPORT NUMBER(S)		
4. PERFORMING ORGANIZATION REPORT NUMBER(S) <b>NPS55-86-013</b>			7a. NAME OF MONITORING ORGANIZATION		
6a. NAME OF PERFORMING ORGANIZATION <b>Naval Postgraduate School</b>		6b. OFFICE SYMBOL (if applicable) <b>Code 55</b>		7b. ADDRESS (City, State, and ZIP Code)	
6c. ADDRESS (City, State, and ZIP Code) <b>Monterey, CA 93943-5000</b>			9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER <b>MIPT # FF3QM52980001</b>		
8a. NAME OF FUNDING/SPONSORING ORGANIZATION <b>C<sup>3</sup>CM Joint Test Force</b>		8b. OFFICE SYMBOL (if applicable)		10. SOURCE OF FUNDING NUMBERS	
8c. ADDRESS (City, State, and ZIP Code) <b>Kirtland Air Force Base, NM 87117</b>		PROGRAM ELEMENT NO.		PROJECT NO.	TASK NO.
				WORK UNIT ACCESSION NO.	
11. TITLE (Include Security Classification) <b>THE SOVIET THEORY OF REFLEXIVE CONTROL IN HISTORICAL AND PSYCHOCULTURAL PERSPECTIVE: A PRELIMINARY STUDY</b>					
12. PERSONAL AUTHOR(S) <b>Diane Chotikul</b>					
13a. TYPE OF REPORT <b>Technical</b>		13b. TIME COVERED FROM <b>Nov 84</b> TO <b>Jul 86</b>		14. DATE OF REPORT (Year, Month, Day) <b>1986 July</b>	
15. PAGE COUNT <b>119</b>					
16. SUPPLEMENTARY NOTATION					
17. COSATI CODES			18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)		
FIELD	GROUP	SUB-GROUP	<b>Reflexive Control, Disinformation, Propaganda, Decision making</b>		
19. ABSTRACT (Continue on reverse if necessary and identify by block number)					
<p>In the ongoing "information war" between the United States and the Soviet Union, a new method of exerting influence has captured the recent attention and interest of Western Sovietologists and military and political analysts. This new method is the Soviet theory of reflexive control, which, briefly stated, can be defined as "a means of conveying to a partner or an opponent specially prepared information to incline him to voluntarily make the predetermined decision."</p> <p>Several authoritative studies have been published which describe in depth and in detail the scientific and mathematical components of reflexive control, and its various military and technical applications. However, less attention has been devoted to an examination of the underlying historical and psychocultural factors which may have contributed to the development of this particular orientation toward decision making. The present research effort represents an attempt to narrow this gap in our understanding of the evolution and significance of the theory of reflexive control, and to develop a</p>					
20. DISTRIBUTION/AVAILABILITY OF ABSTRACT <input checked="" type="checkbox"/> UNCLASSIFIED/UNLIMITED <input type="checkbox"/> SAME AS RPT <input type="checkbox"/> DTIC USERS			21. ABSTRACT SECURITY CLASSIFICATION <b>UNCLASSIFIED</b>		
22a. NAME OF RESPONSIBLE INDIVIDUAL <b>James G. Taylor</b>			22b. TELEPHONE (Include Area Code) <b>(408) 646-2683</b>		22c. OFFICE SYMBOL <b>Code 55Tw</b>

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

19. ABSTRACT (Continued)

psychohistorical framework within which the theory may come to be better understood by Western analysts of Soviet affairs.

1 N 0102- LF 014-6601

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

## Abstract

In the ongoing "information war" between the United States and the Soviet Union, a new method of exerting influence has captured the recent attention and interest of Western Sovietologists and military and political analysts. This new method is the Soviet theory of reflexive control, which, briefly stated, can be defined as, "a means of conveying to a partner or an opponent specially prepared information to incline him to voluntarily make the predetermined decision."

Several authoritative studies have been published which describe in depth and in detail the scientific and mathematical components of reflexive control, and its various military and technical applications. However, less attention has been devoted to an examination of the underlying historical and psychocultural factors which may have contributed to the development of this particular orientation toward decision making. The present research effort represents an attempt to narrow this gap in our understanding of the evolution and significance of the theory of reflexive control, and to develop a psychohistorical framework within which the theory may come to be better understood by Western analysts of Soviet affairs.



B



Accession For	
REF	<input checked="checked" type="checkbox"/>
INT	<input type="checkbox"/>
EXT	<input type="checkbox"/>
Dist	
A-1	

## Preface

This research effort represents an attempt to tie together, in a somewhat coherent and systematic manner, a vast body of material--covering a variety of academic disciplines (history, psychology, political science, cybernetics, command, control, communications (C<sup>3</sup>), military affairs)--which appears to this writer to bear some direct or indirect relationship on the development of reflexive control theory in the U.S.S.R. The purpose here has been to broaden the scope of interest away from its present narrow military/technical focus to include psychocultural and historical factors which may potentially increase our present understanding of "C<sup>3</sup> a la Russe," and specifically of the role of reflexive control. Dr. Roger Beaumont, an historian at Texas A&M University specializing in military affairs and defense analysis, has suggested that:

What needs closer examination and sensitivity is the extent to which the Soviet perspective on C<sup>2</sup> and C<sup>3</sup> includes a broader range; the arts, public information, propaganda, and indeed, all forms of influence and persuasion, including the application of various sophisticated psychological techniques.<sup>1</sup>

This study is by no means intended as a "final word" or authoritative commentary on the subject. It is basically exploratory and descriptive as opposed to scientific in nature. The research method utilized has been primarily a review of the available open literature, both Soviet and Western, as well as material from interviews with two knowledgeable Soviet emigres which served to supplement and enhance the value of the literary sources. The resulting work attempts to discover and draw attention to some potentially valuable relationships--a "first cut" as opposed to a conclusive study of this complex subject area.

This research has been undertaken in a "dialectical spirit," as is appropriate when attempting to approach the subject matter from the "Soviet

Perspective." That is to say, it is expected and, in fact, desired, that the material presented and tentative connections drawn will serve to stimulate interest, dialogue, differences of opinion, and even controversy. From the "thesis" presented here it is hoped that "antitheses" will emerge. According to the Laws of Dialectics, an eventual synthesis will result from this conflict and interaction of viewpoints, thereby causing an evolution (however slight on the dialectical spiral) in our understanding of reflexive control.

Diane Chotikul  
Naval Postgraduate School  
June 1986

## TABLE OF CONTENTS

I.	INTRODUCTION.....	5
II.	A CONTEXTUAL OVERVIEW.....	8
	A. The Present State of Soviet-American Relations.....	8
	B. Terms of Reference and Semantics.....	12
	C. The Impact of Propaganda.....	19
	D. Ethical Systems.....	23
	E. The Emphasis on Control.....	28
	F. Summary.....	35
III.	THE SOVIET THEORY OF REFLEXIVE CONTROL.....	39
	A. Origins.....	39
	1) Environmental and Historical Factors.....	39
	2) The Importance of Cognition and Reflection.....	43
	3) Cognitive Arenas Influenced by Reflexive Control.....	46
	4) Psychocultural Theories and Their Relation to the Development of Reflexive Control Theory.....	51
	a. The Swaddling Theory and "Polarized Opposites.....	51
	b. The Role of Projection and Related Defense Mechanisms....	53
	c. The Psychological Importance of "The Leader".....	60
	d. <u>Lozh</u> and <u>Vranyo</u> --The Russian Heritage of Prevarication...	64
	5) Looking Outward--The Concepts of Maskirovka, "Finland- ization," and Risk-Aversion/Redundancy.....	69
	6) From Past to Present: The Evolution of The Theory.....	76
	B. Definition.....	78
	C. Formalization and Development of the Theory.....	84
IV.	CONCLUSION.....	92
	A. Summary of Key Points.....	92
	B. Implications for the Future.....	95
V.	FOOTNOTES AND REFERENCES.....	99
VI.	APPENDIX A: SUPPLEMENTAL INFORMATION.....	112



## LIST OF FIGURES

<u>FIGURE 1.</u>	HEGEL'S PARADIGM.....	14
<u>FIGURE 2.</u>	THE DIALECTICAL DEVELOPMENT OF SOCIETY.....	17
<u>FIGURE 3.</u>	COMPARISON OF SOVIET AND AMERICAN ETHICAL SYSTEMS.....	24
	TABLE 1: Ethical Compromise	
	TABLE 2: Compromise in Human Relations	
<u>FIGURE 4.</u>	THE GENERAL SCHEME OF CONNECTIONS BETWEEN IDEOLOGY, MORALITY, AND BEHAVIOR.....	25
<u>FIGURE 5.</u>	SOVIET MODEL OF GRAND STRATEGY.....	32
<u>FIGURE 6.</u>	EMPHASIS ON SCIENTIFIC FORESIGHT (NAUCHNOE PREDVIDENIE)...	34
<u>FIGURE 7.</u>	SOVIET HIERARCHY OF MILITARY AFFAIRS.....	34
<u>FIGURE 8.</u>	EFFECTS OF THE UTILIZATION OF SOCIAL POWER IN TERMS OF MOVING TOWARD (+), MOVING AWAY FROM (0), and MOVING AGAINST (-) THE AGENT.....	42
<u>FIGURE 9.</u>	MARXIST-LENINIST "GNOSEOLOGY" (THEORY OF KNOWLEDGE).....	44
<u>FIGURE 10.</u>	TARGETS OF REFLEXIVE CONTROL.....	48
<u>FIGURE 11.</u>	REFLEXIVE STRUCTURE OF THE TARGET OF REFLEXIVE CONTROL....	48
<u>FIGURE 12.</u>	DESCRIPTIONS OF THE TYPES OF NORMATIVE INDIVIDUALS IN BOTH ETHICAL SYSTEMS...	55
<u>FIGURE 13.</u>	MULTIPLE-TIER AWARENESS.....	59
<u>FIGURE 14.</u>	THE IMPORTANCE OF LEADERSHIP PERMEATES ALL LEVELS OF SOVIET SOCIETY....	63
<u>FIGURE 15.</u>	CLOSED CYBERNETIC CONTROL LOOP.....	87
<u>FIGURE 16.</u>	RELATIONSHIP OF CYBERNETICS TO REFLEXIVE CONTROL THEORY...	88
<u>FIGURE 17.</u>	THE CHRONOLOGICAL DEVELOPMENT OF FORMALIZED REFLEXIVE CONTROL THEORY....	91

## I. Introduction

The most effective way to prevent deception is to be continually aware of one's vulnerabilities as a target.<sup>2</sup>

...the strategies and tactics described, especially those concerning reflexive control, should be of interest to our side and it behooves our operators, supervisors, and decision makers to be cognizant of the Soviet viewpoint.<sup>3</sup>

In recent years, a new topic in the ongoing "information war" between the United States and the Soviet Union has come to the attention of Western Sovietologists. The term given to this theory in the field of influence and disinformation is reflexive control. It is a topic, as yet little publicized or understood in the West, which appears to have gained importance in the Soviet Union, especially in the realm of military and, possibly, diplomatic affairs. Briefly stated, reflexive control means, "conveying to a partner or an opponent specially prepared information to incline him to voluntarily make the predetermined decision."<sup>4</sup>

A preliminary attempt will be made here to examine the development, present status and usage, and implications for the future of the theory of reflexive control in the Soviet Union. The present contextual setting--both actual and perceptual--will be explored, as well as the highly significant historical, ideological, and psychosociological factors which have contributed to the emergence of this theory. In the course of discussion, four basic hypotheses will be set forth and examined:

- 1) that reflexive control--although just recently formalized into a scientifically based theory--appears to have existed and been utilized in practice throughout Soviet history;

- 2) that reflexive control seems to represent an integral aspect of the Soviet C<sup>3</sup>/decision-making process and, as such, is a reflection of the Soviet emphasis on purposeful control of the environment in order to increase predictability and create "right conditions;"
- 3) that the advent of cybernetics theory in the late 1950s played an important role in the formalization of the theory of reflexive control;
- 4) that reflexive control is more highly and scientifically developed than is realized and therefore deserves more serious national security attention than it presently receives. This hypothesis has been suggested by certain key developments--in particular, the interest shown in the theory by Colonel-General V. V. Druzhinin of the Soviet General Staff, and the top secret classification afforded to it within the past few years.\*

The United States has traditionally had great difficulty in developing a sophisticated and discriminating understanding of Soviet motivations and of the inner workings of the Soviet system, and this difficulty is still being experienced today. The government of the U.S.S.R. sets a high premium on understanding American words, actions, and cognitive processes. In the United States, on the other hand, there is no equivalent to the Soviet Institute of the United States and Canada with thousands of specialists devoted to studying the contemporary North American scene. Our foreign correspondents, likewise, are neither career internationalists who have mastered the Russian language nor expert Sovietologists. The American academic community focuses primarily on historical issues, while government analysts concentrate on current news developments. In short, there is nothing to compare with the great depth and extensiveness of Soviet analysis of the United States.<sup>5</sup> As a result, the Soviet system in large part remains an abstraction to us and our popular thinking does not generally reflect the realities of the present situation. Moreover, we do not adequately and accurately understand the panoply of factors governing our

\*As claimed by Dr. V. A. Lefebvre, a key figure in the development of reflexive control theory by the Soviet military, now residing and working in the U.S.

relationship with the Soviet Union.

According to Taylor and Powell, "...it is particularly important for the analyst who is studying Soviet command and control to understand the Soviet perspective (i.e. Soviet world view)...."<sup>6</sup> With this key point in mind, and ever aware of the great emphasis placed by the Soviets on understanding one's adversary, the present discussion of reflexive control will commence with an overview of the context--that is, present Soviet-American relations, and common existing perceptions and misperceptions--within which this theory has taken root and is presently developing.

## II. A Contextual Overview

### A. The Present State of Soviet-American Relations

Well-publicized events--such as the Soviet boycott of the 1984 Olympics in Los Angeles; President Reagan's remark about outlawing the Soviet Union forever by use of the atomic bomb, followed by the condemnation of American foreign policy by the Kremlin;<sup>7</sup> the takeover of the reins of power by the youthful and seemingly more Westernized Mikhail Gorbachev; the renewal of arms negotiations in Geneva; and most recently, the Chernobyl accident--have served to create increased interest in and concern about the state of American and Soviet relations. However, as has been characteristic of previous incidents occurring in recent years (e.g. the invasion of Afghanistan, the downing of Korean Airlines Flight 007, the involuntary detention and exile to Gorky of Soviet dissident Andrei Sakharov) such interest among the general public will most likely flare up quickly and die down just as suddenly. For American public opinion, at this point in time, appears to gravitate toward the belief that the threat to world peace posed by the Soviet Union is no longer severe,\* and that there is little or no indication of a pattern of hostility or misunderstanding between the two superpowers, in spite of isolated incidents of this nature.

With the achievement of relative nuclear parity, and the U.S.S.R.'s professed concern about avoidance of atomic warfare,\* many Americans optimistically assert that, in spite of lingering problems which need to be addressed, new hope now exists for a rational and cooperative era in American-Soviet relations. In fact, many intelligent and well-informed Americans, even in prominent government positions, sincerely believe that at this point in time, the United States is more of a threat, and has taken a more aggressive stance in regard to nuclear weaponry, than the Soviets. The Peace

\* See Appendix A(1): Supplemental Information

Movement and the Nuclear Freeze drive, both often unilateral in focus, as well as the continual debate between the "hawks" and the "doves" (even the widespread usage of the terminology itself) in Congress and the media over the military budget are indications of this pervasive trend in American society. Taksar highlights this tendency among academicians by stating, "...there are professors in America who teach us about CIA intrigues and wrongdoings and who are at the same time happy to host any Soviet Communist Party Bureau member especially while bloodshed in Afghanistan or turmoil in Poland (sic)."<sup>8</sup>

In reviewing the course of world events, there are those who have bought into the belief that the Soviet Union is no longer interested in fostering the propagation of worldwide communism and promoting socialist revolution, and is now willing to collaborate with the Western countries in the establishment of a cooperative, peaceful world order:

Some observers have asserted that the Soviets no longer seek their traditional goal of world conquest through revolution. Since the early 1970s and the advent of detente, such views have been expressed quite forcefully (and hopefully) in the West....But world history since 1918 demonstrates that Soviet foreign policy cannot be accepted at face value.<sup>9</sup>

Observers continue not only to take Soviet foreign policy at face value but also, and more importantly, to measure Soviet actions with a Western yardstick. Despite Penkovskiy's well-known anecdote in which the French, British, and American generals reach the same or similar conclusions while the Soviet general arrives at something totally different,<sup>10\*</sup> Westerners persist in seeing the Soviets through a Western cultural prism:

There is a widely held illusion that when the Soviet Union is not openly engaging in revolution, it is doing nothing about it. In fact it is always pursuing the central aim,

---

\* See Appendix A(2)

with all the apparatus at its disposal, of creating the eventual revolutionary situation in which the organized Communist Party loyal to Moscow can take over.<sup>11</sup>

The major reason that statements such as this one continue to be forcefully expressed and yet still, for the most part, disregarded lies in basic Western ignorance of Soviet history, doctrine, values, and goals, as well as a pervasive tendency to attribute to the Soviet Union the same "terms of reference" as as those used by the Western world.

It is essential to recognize that all data released to the West by the Soviets has an inherent propaganda value as well, and it is this material in large part which shapes our understanding and perceptions of the U.S.S.R. The Soviets, therefore, encourage and propagate misperceptions of "symmetry," knowing it is to their advantage to do so. As Lefebvre has stated:

The main condition for success in this propagandistic influence is masking the very fact of influence. For example, this could be done by suggesting the symmetry of Soviet and American societies ("You have red tape and we have red tape;" "Way down deep we are all alike;" "You want peace, and we want peace"). As a result, according to propagandists' plans, the Western audience would not doubt the sincerity of the Soviet representatives or other sources of information.<sup>12</sup>

In games theory, when all nonformulated aspects of the opponent are assumed to be equal or symmetric, this is known as the concept of external symmetry. Martin Shubik has stated that assuming external symmetry, as Americans tend to do in their dealings with the Soviets, can result in a state of vulnerability.\* Important factors such as culture, national character, personality traits, and skill level are omitted from consideration, which ultimately leaves the "player" ill-prepared for unexpected eventualities which may arise in the "game."<sup>13</sup> Thus, the Soviets--being astute players--may outwardly affirm the existence of symmetry, and coexistence as an ideal to strive toward, and we

\* See Appendix A(3) for an historical example of the concept of external symmetry as used to induce a condition of vulnerability.

willingly accept this projected image and "Americanize the Bolsheviks."<sup>14</sup> In his valuable article, "On Creating an Enemy," Robert Bathurst discusses "...the shortcuts we take through the lack of information in order to create the rational actor model of our imaginations, a model who inevitably becomes an American look-alike."<sup>15</sup>

In the Soviet leaders' own minds, however, it is crystal clear that coexistence involves only the exclusion of war as an instrument of policy (a temporary condition until victory can be guaranteed), and that the struggle between communism and democracy (or "imperialist capitalism") will continue by all means short of war: "in the field of ideology there is not and cannot be peaceful coexistence between socialism and imperialism."<sup>16</sup> An in-depth study of the Soviet system, its ideological base in Marxist-Leninist theory, and the "modus operandi" which has characterized the Communist Party since its inception reveals that Westerners underestimate Soviet intentions and abilities. A tendency to ignore the cultural context and terms of reference involved in Soviet theory and practice, as well as an optimistic belief that we can and are influencing the Soviet stance have been pervasive aspects of U.S. policy vis-a-vis the U.S.S.R. Tendencies such as these are not only naive but, in the long run, may pose a serious threat to free world security and stability for, as R. Judson Mitchell has pointed out:

No level of external pressure can induce the Soviets to scrap their fundamental approach to the inevitable conflict of systems; such doctrinal surgery would remove the ideological underpinning of the Soviet system. We can assume as certain the indefinite continuation of Soviet perceptions of zero-sum conflict.<sup>17</sup>



## B. Terms of Reference and Semantics

It is clear to Western Sovietologists--although less so or not at all to statesmen, diplomats, and the average citizen who lack the same extensive knowledge of the Soviet system--that, in fact, the United States and the U.S.S.R. operate under very different perceptions and terms of reference. As Taylor and Powell have pointed out, the Soviets live according to a completely different set of premises and preconceived ideas than Americans, including: 1) Marxian concepts of the structure of society and the course of history, 2) a logical process based on Marxist dialectics as opposed to Western deductive reasoning, 3) a different set of moral laws, and 4) different aims.<sup>18</sup> There seems to be unanimity of agreement among experts that Soviets do think differently than Americans, and that Americans in general appear to have a propensity for ignoring or minimizing this most important fact.

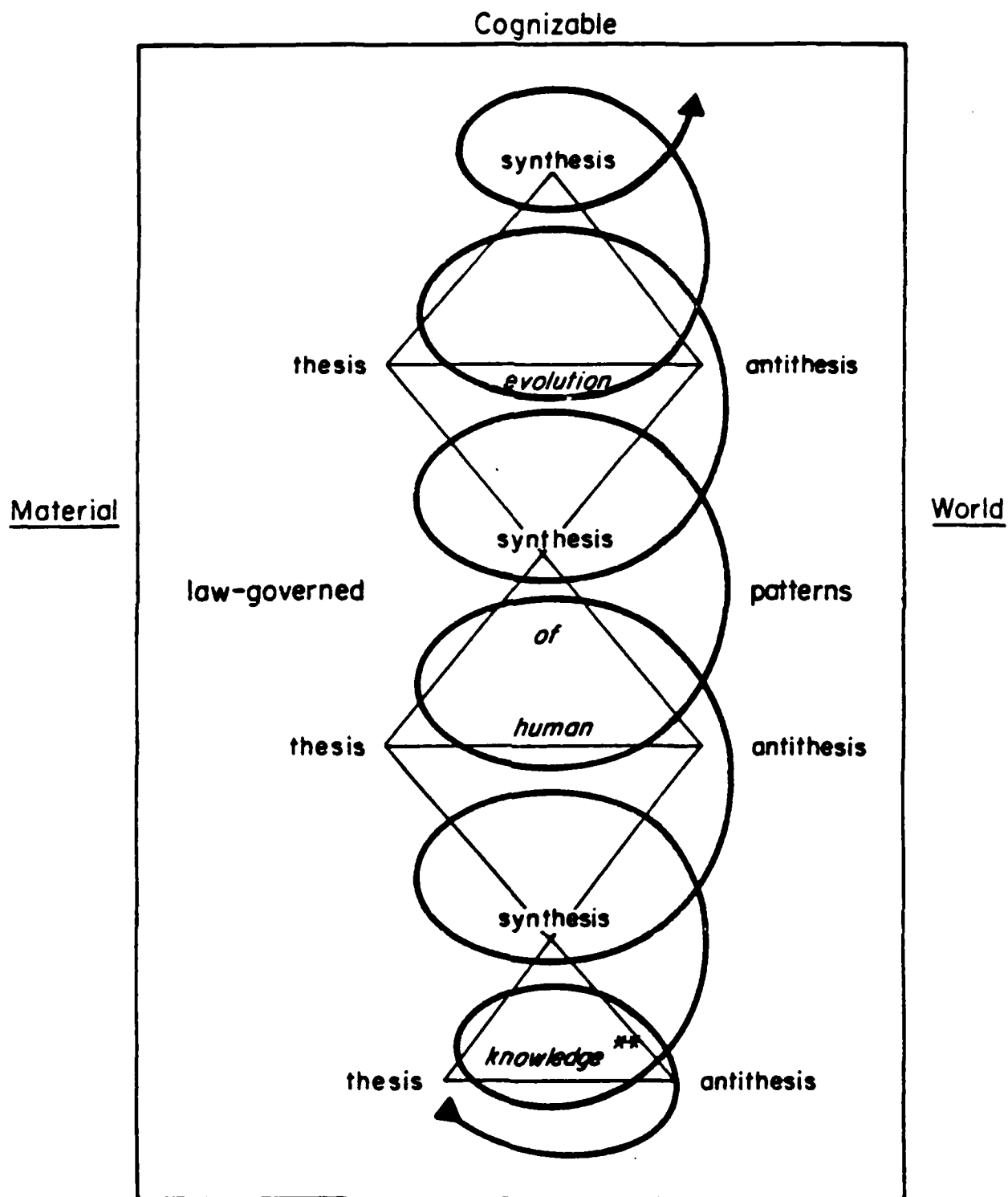
Not only are the goals, beliefs, and practices of the two countries often diametrically opposed, but even the meaning assigned to words or concepts, which we would assume to be cognates, are more often than not very different.<sup>19</sup> These differences permeate and affect every aspect of society--the meanings ascribed to science and research, human rights and welfare, various aspects of military affairs, and peace and coexistence, to name just a few vital areas of concern.

The basis for these fundamental differences lies in the fact that every aspect of life in the U.S.S.R. is explained through the laws of dialectical and historical materialism, and there is no such formalized, underlying, and unifying concept operating in the United States. This philosophical underpinning serves as the basis for the Soviet world view (mirosozertsanie), its

theory of cognition, and all actions resulting therefrom. [For a concise yet comprehensive source book regarding all facets of dialectical materialism, please see The ABCs of Dialectical and Historical Materialism.]<sup>20</sup> Some basic precepts of Marxism-Leninism which are of particular interest for our purposes include the belief that everything in the real world is cognizable and scientifically explainable; that events are purposeful and governed by laws; that as the laws governing the nature of the world are realized through the process of thesis, antithesis, and synthesis (Hegel's Paradigm, see Figure 1), human knowledge grows and evolves accordingly; and that theory must be applied to and proved through practice ("the primacy of practice"),<sup>21</sup> whereas our own approach tends to be more eclectic.

A few examples will suffice to point out the impact of these differences on Soviet and American world views. For instance, compare the Soviet and American definitions of science. In the U.S. view, "any science has two main jobs to do: discovery and explanation. By the first we judge whether it is a science, by the second, how successful a science it is."<sup>22</sup> The pragmatic Soviet assertion that "scientific theory must assist men in their activities in society, in their social problems,"<sup>23</sup> illustrates their different viewpoint on the purpose and place of science in society. It must contribute to social progress and the success of social programs in order to be considered legitimate and verifiable. Primacy of practice, which to Soviet thinkers is equivalent to "primacy of immediate practical need,"<sup>24</sup> also distinguishes the Soviet from the Western definition of research: "...this kind of research is different from what historians and political scientists in Western universities mean by research--an all-around, objective examination, not necessarily limited

FIGURE 1. HEGEL'S PARADIGM\*



\*Marxian dialectics (the doctrine of the unity of opposites) developed from this source

\*\*evolution of human knowledge brought about through the reflection of law-governed patterns in human consciousness through the dialectical process of thesis, antithesis, synthesis

by or geared to any particular, practical political purpose."<sup>25</sup> These examples are merely intended to provide evidence that the Soviet view of the world is much more pragmatic, goal-oriented, and, perhaps most important of all, unified, than that of most Western cultures. E. T. Hall would describe the Soviet Union as an example of a "high-context culture," whereas our own society can be categorized as "low-context," that is, lacking uniform concepts and goals. [For an extensive overview of this interesting topic, please see E. T. Hall's book, Beyond Culture.<sup>26</sup>]

To return again to the area of semantics, probably the greatest single cause of misunderstanding and complacency in the West can be attributed to the Soviet and Western/American concepts of "peace." Sovietologists who have conducted extensive research into the Leninist theory of war,<sup>27</sup> are well aware that the terms "war" and "peace" are interchangeable ones which the communists use to fit the mood and the propaganda line of the moment. The millions of words which have been expended by Soviet writers and speakers against war, the various "peace congresses," campaigns against the warmongering imperialists, and praise for the blessings of peace appear at face value to illustrate the fact that pacifism is extolled as a virtue by the official Communist Party line. A closer examination of the Soviet attitude, however, shows that all this discussion about peace and pacifism has often been verbiage without substance, used to delude the non-Communist world as to the true intentions and beliefs of the Soviet Communist Party.<sup>28</sup> The Cominform Journal states:

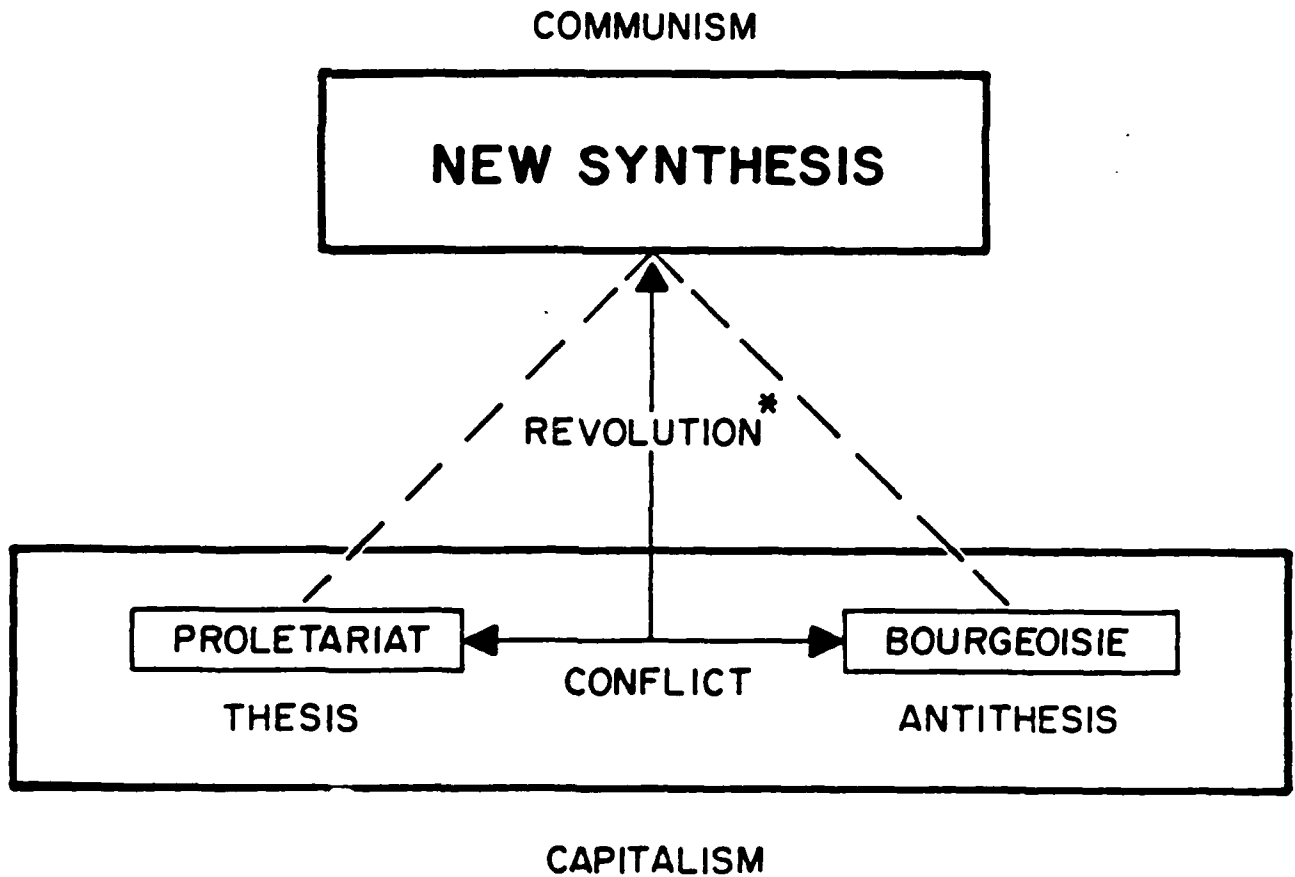
The communist agitation programme (sic) is to be carried out by means of the 'peace' campaign and "peace" is to be used as the principal theme to justify whatever local communist interests demand. In particular, all attempts to build up any organization to resist the possible use of force by the Soviet Union must be prevented.<sup>29</sup>

Revolution is viewed as the necessary catalyst to progress--that is, the inevitable evolution of society from capitalist to communist--within the laws of historical materialism (see Figure 2). Thus, it is clear that a Soviet "peace" can only be achieved through war--war to destroy non-Soviet states. It is interesting to note here a most convenient ambiguity in the Russian language regarding the word for peace, "Mir." When Soviet pacifists shout or carry slogans reading "Trebuyem Mira," it is commonly translated as "We demand peace." An equally accurate translation, however, is "We demand the world."<sup>30</sup>

Through the use of Lenin's distinction between "just" (i.e., pro-Soviet) and "unjust" (i.e. anti-Soviet) wars, the Soviet Union is capable not only of justifying a war against the capitalists and imperialists in the cause of "peace," but even of adopting a hostile stance toward a communist country which happens to reject Soviet leadership and assume "revisionist" tendencies. This justification was used to support the suppression of Tito in Yugoslavia and the invasion of Czechoslovakia; and presently dictates the Kremlin's attitude about the direction the government of the People's Republic of China is pursuing, to cite several examples. Peace to the Soviet government seems to imply aggressive acts by the U.S.S.R. and its satellites. In spite of all the lip-service paid to the concept of peace, it can hardly escape the notice of even the most sympathetic observer that the Soviet Union is the most militarized and militant nation on earth:

The fact that the Soviet Union is the most highly militarized state in the world, not merely in its armament but even more so in its propaganda atmosphere and its educational system, is not accidental. Occasional Soviet statements that Soviet aims are "peaceful" and solely defensive, are merely propagandistic tactics. Of course, Stalin several times pointed out that true "peace" can only exist under

FIGURE 2. THE DIALECTICAL DEVELOPMENT OF SOCIETY



\*causes the "Leap from Quantity to Quality"  
(First Law of Dialectics)

the conditions of a world U.S.S.R., and therefore, when Stalin said he wanted "peace," he in effect was saying he wanted war--war to establish Soviet type "peace."<sup>31</sup>

A logical extension of the ambiguity inherent in the Soviet concept of peace carries over into the domain of "detente," or as the Soviets prefer to refer to it, "peaceful coexistence." The policy of detente resulted from a growing awareness of the catastrophic dangers of the "Atomic Age," and the resulting necessity to reach some sort of ratifiable agreement to forestall the eventuality of nuclear war. The underlying motives for establishing a climate of detente, however, were fundamentally different for the West and the U.S.S.R.:

Where the West saw a promise of stability and of terminating the condition of "neither peace nor war" that has plagued the world since 1945, the Soviet leaders discerned new ways and opportunities of expanding their country's power and influence.<sup>32</sup>

The Soviet readiness to adopt a position of detente was misconstrued by many as indicating a basic and hopeful change in Soviet doctrine and policy vis-a-vis world domination. In reality, this situation was brought about by the Kremlin's realization that conditions in the world were not "right" for an aggressive communist stance, and represents an attempt to buy precious time in order to prepare for the task of furthering communism. This reaction does not conflict with basic Leninist doctrine but rather is a reflection of the principle of "the necessity of 'revolutionary retreat'" to ensure ultimate victory. As Lenin stated, "The strictest loyalty to the ideas of communism must be combined with the ability to make all the necessary promises, to ''tack,' to make agreements, zigzags, retreats, and so on, in order to accelerate the rise to power of the communists."<sup>33</sup> The contrast between the Soviet and American perception of the value of retreat in conflict has been well

expressed by John Collins in his strategic analysis of the two nations. He states, "Unlike the Russians, who know when and how to retreat if necessary, Americans...favor a heroic interpretation of history."<sup>34</sup>

To highlight the flexibility of a Marxist-Leninist interpretation of history, it is particularly revealing to note that the U.S.S.R. publicized the signing of the detente treaty as a major victory, stating that it demonstrated realization by the West of the superior power of the Soviet Union and an acceptance of the inevitability of a communist world takeover--obviously a far cry from the actual U.S. perception of the event.<sup>35</sup> Because we tend to see world events through Western eyes, these subtleties in the Soviet perception of the nature of detente have not been generally acknowledged. In their Soviet connotation, the terms "detente" and "peaceful coexistence" signify both an absence of war (because victory cannot yet be guaranteed) and an intensification of the "struggle" between competing systems by means other than war. As Leonid Brezhnev so aptly stated to his colleague Fidel Castro, "...we realize that successes in this important matter (peaceful coexistence) in no way signify the possibility of weakening the ideological struggle."<sup>36</sup>

### C. The Impact of Propaganda

Open, free societies are natural targets for propaganda campaigns and are exceedingly susceptible to Soviet "divide and conquer" methods. Labin states:

...totalitarians have understood that where democracy reigns it gives considerable weight to public opinion. That is why they who trample it underfoot in their own domain have no greater concern than to win it over in the other camp, while the democracies who respect it abandon it to enemy propaganda without reacting.... totalitarianism moves ahead less on the conviction of its members than on the confusion of its opponents. Communist parties are merely firebrands, and the main effort of the Kremlin is to pervert or weaken the fabric it sticks them into.<sup>37</sup>



Countless attempts by the Soviet Union to exacerbate friction among various Western factions, to encourage dissent and divisions among Western powers and within U.S. society, and to give clandestine encouragement and financial aid to every organization with which it has influence--especially in advocating hostility to the U.S.--could be cited here to support the fact that the ideological struggle is and has been of utmost importance to the Soviet goal of transforming the "correlation of forces" between East and West to the benefit of communism. The Soviets are keenly aware that in the present antagonism between the Soviet and Western worlds the political front is as decisive as the military front, if not more so. The Soviets thus apply a "systems approach" believing that "...armed force cannot prevail unless complemented by calculated political, economic, social, and psychological campaigns."<sup>38</sup> It is abundantly clear that most Americans have not realized the fine distinction between absence of war and the intensification of the ideological struggle--contradictory terms to our way of thinking, but not to the Soviets.

The optimism and complacency which has resulted in some circles due to our misunderstanding and "Americanization" of the Soviets has Sovietologists particularly concerned. They feel that the relaxation of tensions and precautions during the period of detente, and still in evidence today in spite of the more "hard-line" stance of the present administration, will enable the Soviet authorities to make major advances toward:

...extend(ing) their influence over the western half of the European continent, the U.S., and ultimately the world. Their goal is to make use of the West's great resources in technology and skilled manpower (as)...present conditions are unfavorable to both spontaneous revolution and military conquest.<sup>39</sup>

The latter part of this statement receives considerable attention from Soviet emigres to the U.S. In an essay addressed to the Stanford University community, Michael Taksar explains the Soviet method of screening and selecting Soviet "scientists" (many of whom are, in reality, KGB agents) to be sent to conferences and meetings in the United States. He then goes on to illustrate and criticize American academicians and researchers who willingly and trustingly share sensitive technological, and even military, data with these so-called scientists--information which he feels is destined to be adapted to Soviet needs and subsequently used against the U.S. Taksar states:

...with American carelessness, stealing technology is a simple exercise for novices. The real problem is to find out what deserves attention. In this respect the American universities are a real bonanza for Soviet specialists in civilian (sic). Concentration of research combined with an open atmosphere and willingness of cooperation makes work of Soviet agents relatively simple.<sup>40</sup>

Taksar also makes the point that, "The amount of stolen Western technology in the U.S.S.R. is immense,"<sup>41</sup> a situation that portends serious risk to national security. And yet, in spite of efforts to educate the public regarding this danger by Taksar and others, it appears that technological subversion is being allowed to continue unabated.

It is evident that, in addition to technological usurpation, many of the same tactics and appeals used in previous decades with such effectiveness are still being used today.\* These propaganda techniques are being used with equal efficacy to influence to Soviet benefit the neo-Pacifist and Nuclear Freeze movements, and public opinion in general, in Western Europe and the U.S. If anything, it can be said that the Soviets have learned and profited from their propaganda mistakes of the past three decades, and that their approach now is more highly refined, scientific, and effective than ever

\*See Appendix A(4) for an historical example of an effective propaganda method still utilized today.

before.<sup>42</sup> The obvious corollary to this fact is that the Western world has not made any significant progress in either understanding or counteracting Soviet propaganda. A question which must be asked at this stage is what has prompted the evolution of this state of affairs. Why has the Soviet Union been so successful in the perpetration of effective propaganda campaigns, and why has the United States been so lax in counteracting harmful disinformation carrying with it the potential for destroying everything we stand for?

Extensive research has been conducted and much has been learned about the Communist propaganda network and the techniques it employs in creating "the ideal conditions for the evolution of communist (i.e. Soviet) society." The basic techniques and concepts of disinformation and deception are well documented, and the Communist Front organizations have been analyzed at length. Yet, communist propaganda is still a powerful force in international affairs and, in spite of the dangers inherent in ignoring such a potent weapon, the West remains slow and inept in the field of propaganda measures and counter-measures. John Clews, an expert in the field of Soviet propaganda, explains that among Western cultures there is a general distaste for the very concept of propaganda which is constantly working to our disadvantage when dealing with the Soviets. He states:

In the more sophisticated societies we have become accustomed to dismiss communist propaganda--or what we conceive to be communist propaganda--with a shrug and forget all about it....We prefer to ignore the lessons of history, which have shown repeatedly the vital strategic and tactical function of propaganda at decisive periods in the progress of civilization. This was realized by the Communist movement from Lenin's earliest days.<sup>43</sup>

To reiterate, why does this fundamental difference exist between Soviet and Western (in particular, American) societies? In addition to the cultural and

cognitive dissimilarities already mentioned, it appears that the answer to this question can be found in two areas: 1) the ethical systems which govern the value structure of the two societies, and 2) the different emphasis placed on long-range planning, strategy, and maintenance of control by the two societies.

#### D. Ethical Systems

It has been pointed out that there are many significant differences between the two societies in terms of semantics, priorities, and goals, but some would argue that the difference is even more profound than this:

...Communist society does not have a common ethos with the West. It cannot be evaluated by the cultural standards common to the West.<sup>44</sup>

Vladimir Lefebvre, in his seminal work The Algebra of Conscience, takes this point even one step further, stating, "...the difference between Western and Soviet society is much deeper than usually assumed: this difference touches upon the fundamental structure connecting the categories of good and evil."<sup>45</sup> In other words, his thesis is that the basic ethical and moral systems of the two societies are different. He describes the first system, as exemplified by the U.S., as one in which the compromise between good and evil is viewed as evil; where ethical compromise is discouraged, but compromise in human relationships is encouraged. In the second ethical system, as represented by the U.S.S.R., just the opposite holds true. There, the compromise between good and evil is viewed as good: ethical compromise is encouraged, but compromise in human relations discouraged (see Figure 3). Lefebvre states that the Soviet Soviet Union is "the most developed society in the world whose culture is based on this second ethical system."<sup>46</sup>

Perhaps most importantly, Lefebvre's book explains an apparent contradiction

FIGURE 3. COMPARISON OF SOVIET AND AMERICAN ETHICAL SYSTEMS\*

TABLE 1: Ethical Compromise

#	STATEMENTS	AMERICANS		SOVIETS	
		% in agreement	2-tailed confident interval for p=95%	% in agreement	2-tailed confident interval for p=95%
1	A criminal can be punished more severely than the law requires, if this may serve as a deterrent to others. _____ Yes _____ No	11.1	+6.5 -	80.6	+6.65 -
2	A doctor should conceal from a patient that he has cancer, in order to diminish the patient's suffering. _____ Yes _____ No	1.14	+4.1 -	78.3	+6.86 -

Results: SOVIETS: Ethical Compromise

AMERICANS: No Ethical Compromise

TABLE 2: Compromise in Human Relations

#	STATEMENTS	AMERICANS		SOVIETS	
		% in agreement	2-tailed confident interval for p=95%	% in agreement	2-tailed confident interval for p=95%
1	A good person in a situation of conflict with an insolent person: _____ would not seek compromise _____ would seek compromise	24.1	+9.05 -	70.0	+7.48 -
2	Two terrorists are hijacking a small plane. There is a possibility of killing them without injury to the passengers. Another possibility is to negotiate for surrender. The head of the rescue group decides not to negotiate. Did he act correctly? _____ Yes _____ No	24.7	+8.95 -	58.5	+8.06 -

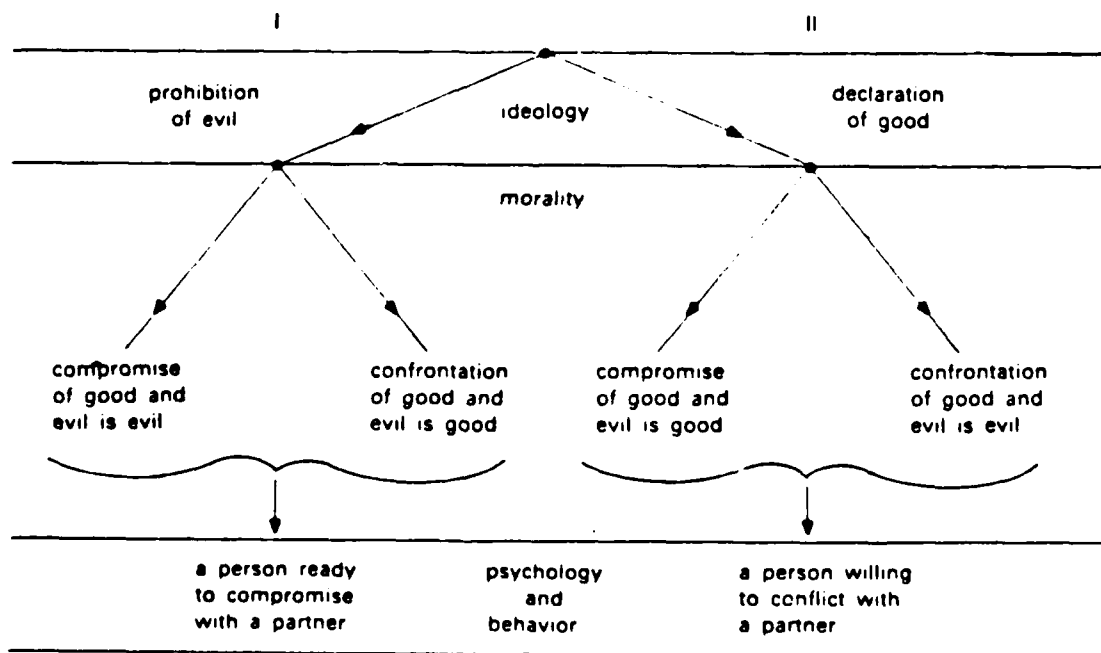
Results: SOVIETS: No compromise in human relations AMERICANS: Compromise in human relations

\*Derived from Lefebvre, V. A., Algebra of Conscience, p. 7, and class handout.

in terms which has helped to perpetuate belief in the external symmetry of the West and the Soviet Union. That is, the fact that in Soviet ideology there is no advocacy of evil. On the contrary, official Soviet documents are imbued with declarations of good. How does this lead to the establishment of the second ethical system? As Lefebvre explains it,

Christian ideology is based on prohibition of evil; Soviet ideology is based on declaration of good... The Moral Code contains a declaration of good: a person is called to be 'honest, truthful, morally pure, simple, and modest.' Such formulations lead to ethical compromise, since evil is not prohibited and may be used if it is necessary for the triumph of good. ("the end justifies the means") In the other part of the Moral Code there is a requirement to be ruthless toward an enemy. We can see that the ethical demands of communism are also logically constructed, but in the framework of the second ethical system. Therefore, prohibition of evil leads to the morality of the first ethical system, and declaration of good leads to the morality of the second ethical system.<sup>47</sup> (see Figure 4)

**FIGURE 4. THE GENERAL SCHEME OF CONNECTIONS BETWEEN IDEOLOGY, MORALITY, AND BEHAVIOR\***



\*From Lefebvre, V. A., Algebra of Conscience, p. 86.

This explains why an American studying the Constitution of the U.S.S.R. or other public pronouncements may be easily swayed to believe that the Soviets are highly moral and ethical people--we are interpreting their statements according to our own ethical system rather than theirs, and thus are misled into feeling that they do not differ significantly from us, nor is their system a threat to us. To understand how dire a misinterpretation of reality this really is, however, it is necessary only to heed the following statement by Stalin--a classic example of the second ethical system in action:

A diplomat's words must have no relation to actions--otherwise what kind of diplomacy is it? Words are one thing, actions another. Good words are a concealment of bad deeds. Sincere diplomacy is no more possible than dry water or iron wood.<sup>48</sup>

Once again, no group of people is more aware of this reality, and concerned about the American tendency toward complacency with regard to the present world situation than the Soviet emigres; including Dr. Lefebvre himself and Dr. Vladimir Ozernoy, who spoke at the Naval Postgraduate School in 1984 on the topic of Soviet Operations Research.<sup>49</sup> During his presentation, Dr. Ozernoy described his awe at American naivete regarding Soviet intentions and goals, and at the vast number of people who truly feel that even a takeover by the Soviet Union would not adversely affect the American lifestyle, and might in fact serve to bring about some welcome changes. In his words, and through the use of slides depicting the grimness and despair of everyday Soviet life, Ozernoy emphatically discounted these thoughts and feelings as ridiculous, based merely on ignorance and wishful thinking. He recalled that prior to his emigration to the U.S. many of his Soviet colleagues tried to dissuade him with the argument, "What is the use? It is inevitable that America, too, will eventually be communist." At that time, he vigorously rejected this line of

reasoning. Now, however, five years after arrival, he is beginning to fear that his friends may have been right after all--not as a result of the inherent inevitability of communism (a belief he continues to reject), but rather due to American ignorance and unfounded optimism.

He sees this tendency as resulting from the same sources which Bouscaren delineated thirty years ago:

The responsibility for the ignorance and prejudice about the nature and purposes of Soviet foreign policy is two-fold. First, the Soviet Government maintains throughout the world an elaborate organization designed to present a plausible but distorted picture of Soviet policy as one designed to serve the interests of the working classes all over the world. Secondly, there continues to exist, in some of the circles at which Soviet propaganda is chiefly directed, a tendency, based on wishful thinking or historical or theoretical preconceptions to accept the Soviet policy as credible.<sup>50</sup>

Solzhenitsyn has expressed the problem in even blunter terms:

...it is not any difficulties of perception that the West is suffering, but a desire not to know, an emotional preference for the pleasant over the unpleasant. Such an attitude is governed by the spirit of Munich, the spirit of complaisance and concession and by the cowardly self-deception of comfortable societies...

Although this approach has never helped preserve peace and justice and those who have followed it have always been crushed and abused, human emotions have proved stronger than the most obvious lessons, and again and again an enfeebled world draws sentimental pictures of how violence will deign to assume a gentler nature and will readily abandon its superior strength, so that meanwhile everyone can continue to live a carefree existence.<sup>51</sup>

This powerful and thought-provoking statement from one of the world's most eloquent authorities and spokesmen on the "dangers of complacency and an underestimation of the enemy" leads us directly into the second area of consideration explaining the vast superiority of Soviet propaganda, and consequently its dangers for us.



### E. The Emphasis on Control

The difference between the Soviet and American emphasis on control, long-range planning, and strategy is becoming a subject of increasing interest and importance in the eyes of Western Sovietologists. This subject is crucial to our understanding of the theory of reflexive control, and will thus be explored in greater depth in the next section of this paper. Here, it will suffice to highlight some of the major dissimilarities in the philosophies of the two nations regarding control.

The Soviet Union is a society based on the principles of science and the belief that all phenomena are governed by unified dialectical laws. Discovery of these laws (i.e. truth) and adherence to them are central aims of the state. Marxist-Leninist philosophy is epitomized as the key to discovery of these law-governed patterns; it is considered "the only reliable basis for all scientific knowledge."<sup>52</sup> Marxism-Leninism both fosters an emphasis on control and has an inherent and basic need for it. Amvrosov et. al. have stated:

Socialism is characterized by the control of all spheres of the life of society, which is carried out under the leadership of the Communist Party on the basis of science. Scientific control of economic, sociopolitical, and spiritual life is an objective regularity of the building of communism. Developed socialism creates new possibilities for the expansion of the limits of scientific control.<sup>53</sup>

In the Soviet view, the development of communism is dependent on the directed, scientific control of society and a great deal of the work and effort of societal leaders is devoted to this goal. In addition, there is "a conscious effort to combine science with ideology in order to insure that science is directed towards Communist Party goals."<sup>54</sup>

In the United States, aside from the practical need for control to maintain law and order and ensure a viable economy and social structure, such

considerations as individual freedom, human rights, and pursuit of happiness take precedence over control issues. In a sense, this country was founded by people in search of freedom from control and constraints--of a religious, social, or political nature--and hence, the very concept of control often has a negative connotation. Freedom of thought and expression supersedes adherence to a particular mindset, and tolerance of diversity overshadows social conformity. Control--especially when expressed in political or scientific terms--conjures up visions of "Big Brother" to the average American and, outside of limited military applications, is not a widely accepted value.

This very real and fundamental philosophical difference has far-reaching repercussions. By definition, an emphasis on control necessarily requires an emphasis on planning to assure that desired outcomes are achieved. Well-focused goals, such as establishing the ideal communist society, lend themselves readily to--or, more accurately, demand--long-range planning and forecasting. In Soviet economics we therefore see Five-Year and Ten-Year Plans; in the Soviet military, a trend toward a cybernetically based theory of troop control (upravlenie voyskami/silami), and projections for the eventual total automation (ASUV) of the Command, Control, and Communications (C<sup>3</sup>) System. [These subjects will be expanded upon in Section III].

Another important component of the Soviet emphasis on control and planning is the emphasis placed on a holistic, systems approach to the subjects. Just as all phenomena are believed to be governed by the same dialectic laws, so all cognizable, material phenomena are seen to impinge upon one another and interact to form the real world, which is then reflected in human consciousness. Because of the Soviet recognition of this interconnectedness, they are advocates of a "systems" approach to planning and control. While Americans tend to

fragment a problem into smaller components and view each section in isolation the Soviet method is to examine the "big picture" and to take into account all components which have a direct or indirect bearing on the particular component being studied. While rather a nebulous concept to the Western way of thinking to the Soviets the systems approach means:

...perception and investigation of objects (i.e. processes and phenomena) as the totality of interconnected and interdependent elements (parts) of a definite integral formation--a system. The systems approach is a concrete manifestation of dialectical-materialist teaching about the universal interconnection and processes of reality and is one facet of Marx's dialectics.<sup>55</sup>

[For more detailed overviews of Soviet Systems Theory, please see the works of N. P. Buslenko,<sup>56</sup> and W. S. Powell and J. G. Taylor<sup>57</sup>].

This approach has proved to be of particular significance in the field of military affairs. Collins has pointed out an important distinction between tactics, strategy, and what he terms grand strategy in military planning and execution. He and others have pointed out that the Soviets concentrate on a consideration of both military and social factors in developing a "master plan of combat" in accordance with the objective laws of war and armed combat (as defined dialectically). In the U.S., on the other hand, we exclude "non-combatant" factors and emphasize procedural considerations and the performance of hardware. In other words, the Soviets have a systems/strategic orientation to military affairs in comparison to the technical/tactical orientation of the U.S. Western belief dictates that warfare is stochastic in nature and cannot be scientifically quantified, whereas the Soviets believe it is both deterministic and quantifiable. Collins states that in American military affairs there has been a traditional discrepancy between the development of strategic thought and the development of technology. In his words:

This nation is unsurpassed at devising tactics. It excels at military technology....it adapted mass-production techniques to the needs of war. But the allegation persists that, over the years, U.S. military professionals and their civilian colleagues have failed to do their homework in the field of grand strategy. They are charged with "winning" battles but "losing" wars, and with "winning" wars but failing to attain national security objectives by disregarding the lessons of history and thus duplicating past mistakes.<sup>58</sup>

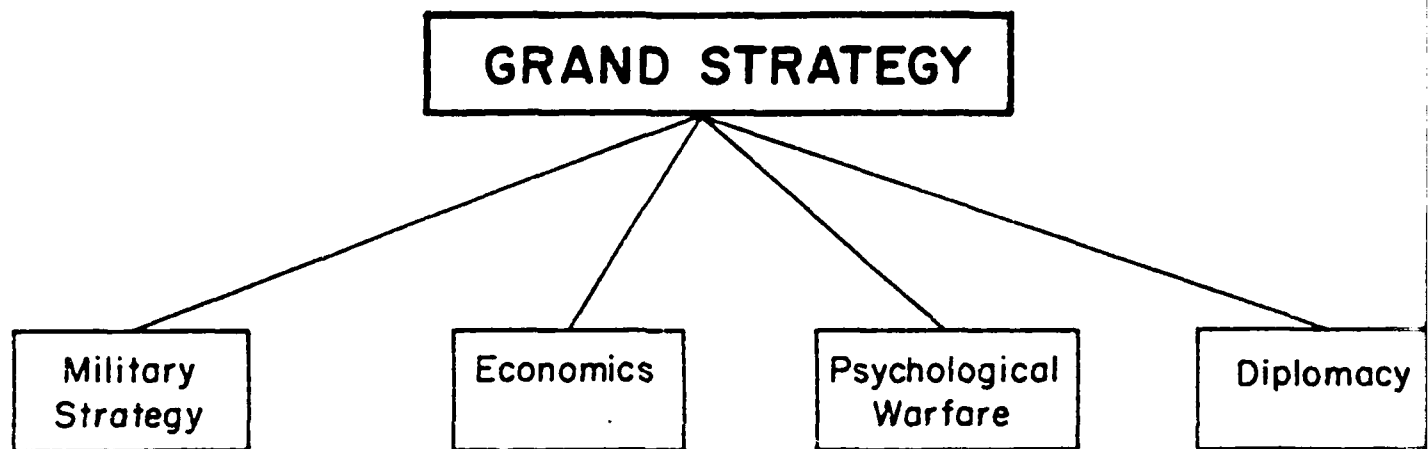
The Soviets, on the contrary, due to their scientific, systems orientation, are experts in correlating political objectives with military aims in a manner which best serves their national interests--the approach known as Grand Strategy (see Figure 5). As Collins describes it:

Grand strategy, the art and science of employing national power and influence to attain national security objectives, is the most important and least understood aspect of national defense. If grand strategy is poorly conceived, the life-blood of a nation's youth and billions in national treasure can be wasted on worthless causes.<sup>59</sup>

Numerous examples from the World Wars, Korea, and Vietnam are used consistently to illustrate situations in which America's strategic shortcomings have overshadowed her technological strengths in warfare; and where omission of the influence of non-combatant factors has changed immediate successes into long-term failures. The most glaring, and probably most widely cited, example to support this point is that if America had taken a more careful, long-range, and analytical approach to the treaty negotiations at Yalta after World War II, the Soviets would never have been able to gain the concessions and brought about the "right conditions" necessary to catapult them to superpower status. In other words, our own intelligence weaknesses and lack of rigorous scrutiny of a critical situation actually played right into Soviet hands and aided them greatly in attaining their present status as our most powerful adversaries.

It appears that U.S. strategists suffer from a syndrome identified two hundred years ago by Marshal de Saxe, who described the symptoms as follows:

FIGURE 5. SOVIET MODEL OF GRAND STRATEGY\*



	TIME	VALUE	SCOPE
TACTICS	short	small	small
STRATEGY	long	large	large
GRAND STRATEGY	longer	larger	larger
GRAND TACTICS	short	largest	largest

product of the nuclear era

\*derived from Collins, John M., Grand Strategy: Principles and Practices.

"in default of knowing what should be done, they do what they know."<sup>60</sup> For much of our history lack of concern for strategy has been interpreted as a virtue, an essential element of the religious version of "national destiny." This belief persisted through World War II, and "failed to discern the deep ideological content of Soviet foreign policy and also deliberately divorced U.S. political and military objectives."<sup>61</sup> This same criticism has been made of our shortsighted policies in the Korean and Vietnamese Wars. The Soviets, in contrast, see war as an extension of politics. Decision making and scientific forecasting (nauchnoe predvidenie) are key elements in military planning, (see Figure 6); and military doctrine, military science, and military art are considered to form a hierarchy of integral, complementary aspects under the umbrella of military affairs (see Figure 7). The Soviets deride American and British reliance on "native wit" and intuition on the battlefield, feeling that these qualities are not substitutes for a scientifically formulated plan.<sup>62</sup>

American strategic deficits can be summarized as follows: 1) a lack of emphasis on the need for a "master plan" (no Grand Strategy approach); 2) a lack of understanding, or misunderstanding, of the opponent's cultural heritage, perception of the situation, motivation, and goals (his "terms of reference"); 3) failure to learn and profit from the "lessons of history" (no unified, systematic philosophy of warfare); 4) a tendency to concentrate on tactics and technology to the exclusion of related factors (tactics versus strategy); and 5) a reliance on the "superiority" of American technology and troops without basis in rigorous, objective analysis (an "ethnocentric" attitude). Conversely, the Soviets have a much greater appreciation of the importance of the above five points and have turned them into assets; a fact which is enhanced by American deficiencies in these areas.

FIGURE 6. EMPHASIS ON SCIENTIFIC FORESIGHT (NAUCHNOE PREDVIDENIE)

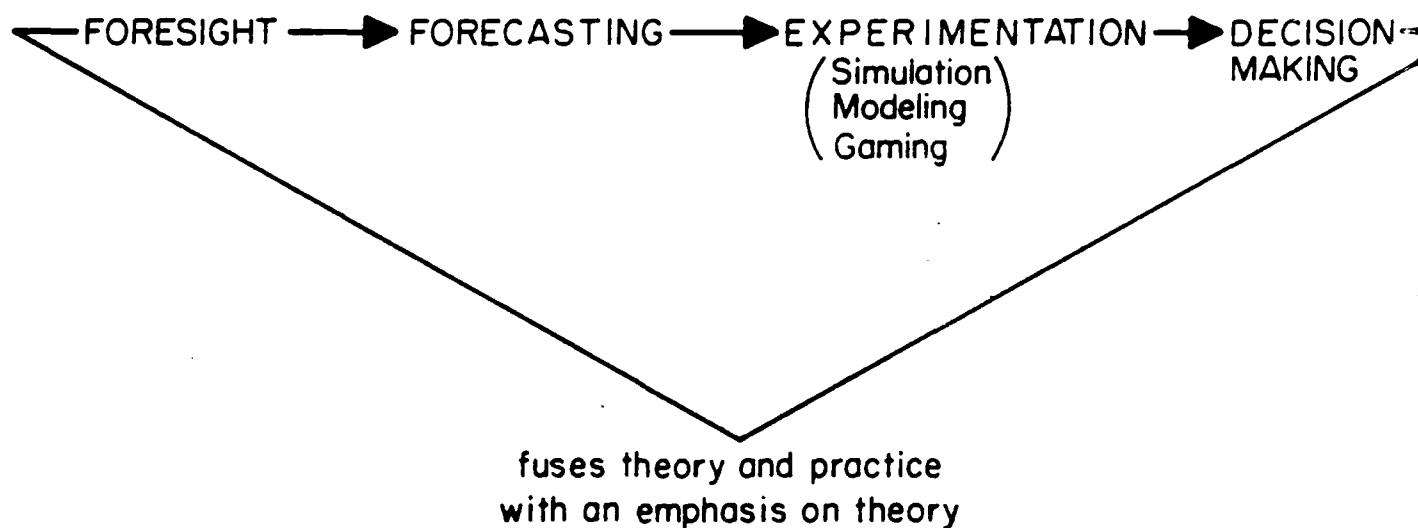
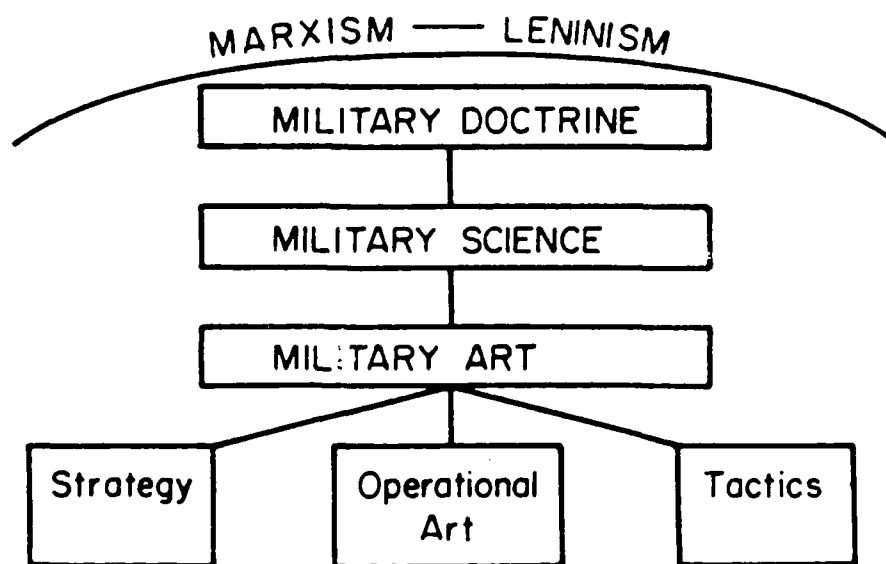


FIGURE 7. SOVIET HIERARCHY OF MILITARY AFFAIRS



One final point must be addressed. The Soviets are aware that surprise and deception compound and strengthen the effectiveness of control, and have thus incorporated the concept of surprise (maskirovka) into their strategic planning, both military and diplomatic. Ulam has made the observation that "secrecy and skill in timing its moves have often been the main ingredients of the Kremlin's diplomatic successes."<sup>63</sup> Maskirovka has proved to be a great asset for the Soviets when dealing with Americans because, "Soviet strategy, like Soviet thinking, has always been devious where American has been direct."<sup>64</sup> In other words, it is much easier for the Soviets to read America's "up-front" policies, analyze, and model them for countermeasure development than it is for us to understand their more clandestine, secretive approach and methodology. As Sarbin has observed:

One's chances of gaining or holding an advantage are proportional to one's ability to predict the conduct of the adversary. To the extent that predictions are valid, to that extent does the actor have the edge in any competitive situation. His own strategic plans will take into account the predicted actions of the adversary.<sup>65\*</sup>

#### F. Summary

At this point, considering the myriad of factors discussed thus far which have an impact on the issue, it appears that the Soviets have a distinct advantage over the West in terms of conducting well organized, effective military and diplomatic campaigns. We can learn and profit immensely from certain aspects of the Soviet orientation--in particular, 1) their strong emphasis on the importance of context and cognition in decision making, 2) their adherence to the systems approach, which affects and impinges upon every aspect of Soviet life from economic planning to their comprehensive theory of troop control, and 3) their strategic orientation as opposed to our emphasis on technological and tactical considerations. The better our understanding

\* Maskirovka and related subjects will be discussed in greater detail in Section III.A.5 of this paper



of the Soviet approach becomes, the more we will be able to distill and utilize those aspects which will aid us in becoming more adept and effective in our own handling of military and foreign affairs. In addition, there is the more obvious, and even more crucial, goal of gaining knowledge in order to develop more effective countermeasures. Being well informed is a prerequisite to any type of planning, and particularly to military planning.

However, due to our dissimilar ethical and philosophical approaches to life in general, and to combat in particular, it is important to use discrimination in determining which aspects of the Soviet approach we adopt for our own use. There is evidence that there have been times when the U.S. government, the CIA in particular, has utilized some of the self-same devious tactics and subversive methodologies we prefer to attribute to the Soviet government. These include the use of "implicit" terror, creation of front organizations and cells of agitators, inducement of food shortages, and even "neutralization" of key persons we consider unfriendly to our cause.<sup>66</sup> Actions such as these carry with them the danger of discrediting America's image as a bastion of freedom and justice in the eyes of the world, and may serve to justify and reinforce criticisms expressed by our Soviet counterparts for the purpose of fostering anti-American perceptions and emotions.

There is no denying that the U.S. is not perfect in this regard and is capable of making errors and even occasional immoral decisions. However, these shortcomings in no way detract from the fact that, when conducted by the Soviet Union, these types of actions do not represent mere lapses in morality but are rather policy decisions in strict accordance with the Soviet moral code (see Section II.D. Ethical Systems, pages 23-27). As important as it is for America as a free, just society to remain vigilant against infringements of

our deeply felt principles regarding human rights and the sovereignty of nations, it is imperative that we maintain our perspective on the situation and not become overly self-critical. Revel points out the danger inherent in this outlook by saying:

...in non-Communist nations, the faults of free societies are so magnified that freedom appears to mask an essentially totalitarian reality, while the faults of totalitarian societies are so minimized that those societies appear to be free, in essence if not in appearance. Such societies are pictured as being fundamentally good, though for the time being they do not honor the rights of man, whereas free societies are evil in nature, even though their subjects live in greater freedom and less misery.<sup>67</sup>

Soviet propaganda experts are well aware of this tendency toward self-criticism and guilt in the democratic societies, and take full advantage of it in their literature aimed at the Western audience. For revealing illustrations of this often overlooked point, please see the recent Soviet propaganda publications, Whence the Threat to Peace,<sup>68</sup> Grenada: U.S. Terrorism in Action,<sup>69</sup> International Terrorism and the CIA,<sup>70</sup> and Information Imperialism.<sup>71</sup>

Most Sovietologists agree that the present world situation, with the pervasive belief that the Soviets are "just like us" with similar standards and goals, or in fact fundamentally better than us as Revel's statement implies has enabled them to lay the groundwork for a powerful, well organized, subversive network of Communist fronts, "peace" movements, and other deceptive elements. Within this mighty arsenal, a recently formalized and potentially powerful technique has caught the attention of those most concerned with the Soviet threat. This is the theory of reflexive control.

The remainder of this paper will be devoted to an attempt to: 1) trace the origin of reflexive control in the psychocultural and historical context of Soviet society, 2) define it as a formal concept, 3) explain why it is

important, and 4) discuss the implications of this formalized concept and its potential impact on American military and diplomatic policy. Reflexive control appears to be a theory from which the United States could most assuredly derive a dual advantage. It is of utmost importance that we understand this powerful technique in order to focus on developing effective countermeasures. At the same time, it is a technique which may prove invaluable to our cause if we devote sufficient study and attention to it, thereby enabling us to learn how to effectively adapt and utilize it for our own purposes and to our own advantage. Roger Beaumont clearly defined the basic problem facing American military and intelligence specialists when he stated:

What is needed is an extension of the view of Soviet C<sup>2</sup> and C<sup>3</sup>\* from the military realm to the broader context of the intellectual and cultural system from which it derives.<sup>72</sup>

---

\* The theory of reflexive control can be classified under the general rubric of C<sup>3</sup>

### III. The Soviet Theory of Reflexive Control

#### A. Origins

##### 1) Environmental and Historical Factors

There is no conception more fundamental to Soviet Communism than that of man's perpetual struggle toward a greater command of the universe in which he finds himself.<sup>73</sup>

Throughout Soviet history, and even prior to the Bolshevik Revolution of 1917, control has been a key preoccupation of the people of Russia. A major factor necessitating this mindset has to do with the harshness of the climate and environment which have constantly pitted the peasant man of traditional Russia against the relentless forces of nature on the desolate Russian steppes. It appears that nature and history have combined to implant and develop in the Russian character certain traits that have helped their rulers establish and maintain a dictatorship over the people. Vakar has pointed out that in discussing the development of Soviet communism we must not overlook:

...the inescapable circumstance that the Soviet Union is a nation populated by Russians; that most of these Russians were or still are peasant Russians; that regardless of anything which Marx, Engels, Lenin, Stalin, Krushchev, Suslov or anyone else has written or said, they continue to be affected or even dominated by the indisputable facts of their peasant heritage, their peasant environment, their peasant tradition.<sup>74</sup>

Some of these traditional peasant traits include a capacity to endure hardship, a readiness to bow to the inevitable, and a willingness to submit to authority. Vakar states that the most striking fact of Russian peasant life was its primary communism. The basic social unit being not the person but the household; the basic political unit, the village. To each of these an individual inextricably belonged, and could not act or be thought of in his daily existence apart from them. The peasant village was thus a totalitarian

society in miniature--legislative, judicial, executive, and moral authority all merged in the head of the household and it was the duty of all members to obey. Klaus Mehnert has succinctly described the underlying psychological factors which bolster and protect communist ideology:

...the authority of the state in Russia is nourished by roots that go far deeper than police tyranny, externally conditioned habit patterns, and the influence of education and propaganda. The Byzantine theocratic tradition has helped to create the psychological climate for the present leaders' claim to be the embodiment of truth.... Both priest and Party functionary have in turn been credited with possession of the sole, absolute, indivisible truth--the former through the revelations of God, the latter through the no less infallible medium of "scientific" knowledge...this attitude is fostered by the Communists (for)...when only one truth exists, all that the leaders in the Kremlin need to do is convince their people that they alone hold the key to it, thus creating for themselves a sacrosanct position of authority....<sup>75</sup>

These tendencies have also been reinforced by what Berdiaev described as the characteristically Russian search for "an integral outlook which would give an answer to all questions of life, unite theoretical and practical reason and give a philosophical basis to the social idea."<sup>76</sup> This search appears to be at the root of Soviet systems theory and cybernetics development as well as of their quest for unified, totalitarian leadership.

A 'sacrosanct position of authority' naturally contributes greatly to the maintenance of the control required to allow the Communist Party to remain at the helm of "the great scientific, socialist experiment." However, this position in itself is not enough to ensure that contamination of the populace's beliefs will not occur, and means must also be developed and made available to prevent the possibility of such contamination. There is no denying the fact that the use of forceful means to perpetuate control is prevalent in the U.S.S.R. Not only is the population subjected to constant surveillance, but there are also severe penalties--imprisonment, commitment to insane asylums,

slander and loss of status and employment, even death--for deviations from social regulations and norms. From the purges of Stalin's regime to the Gulag Archipelago to the exile of Sakharov, the injustices and human rights infringements of the Soviet regime have been well documented.

However, there is also no escaping the fact that the percentage of active or passive dissidents is counterbalanced by a much larger majority of the population who believe in and heartily endorse the Soviet system as embodied in the Communist Party. The Soviet government has thus far been skillful in the way it has tied the fate of many individuals in the country to the fate of the regime. This in spite of the fact that "by and large it was not the down-trodden who were drawn to the Party by its ideals or its dialectics of class struggle; it was the opportunistic who caught the promise of personal power and success."<sup>77</sup> As H<sup>ugh</sup> explains the situation:

The fact that the instruments of control in the Soviet Union have functioned so much more effectively over the years indicates that at some level the Party has maintained the support of large segments of the population.<sup>78</sup>

How has this been accomplished so thoroughly and effectively? Obviously, the threat of forceful retaliation for disobedience or dissent is effective, but generally has the negative effect of lowering a person's respect for and loyalty toward the control agent. Although the interrelationship between social power and reactions to the influencing agent is not yet entirely clear, it has been suggested through numerous studies that coercion by a supervisor will lead to "movement toward" in public behavior (change in overt behavior), but "movement against" in private opinion and in identification (personal rejection of the supervisor). Legitimate power, on the other hand, will lead to "movement toward" in behavior, private belief, and, most importantly, in

evaluation of the supervisor.<sup>79</sup> In terms of effectiveness, therefore, it is evident that legitimate power would be the more desirable type to exercise, and would be the form of power a well-informed, knowledgeable control agent would choose to possess. (See Figure 8 below).

FIGURE 8. EFFECTS OF THE UTILIZATION OF SOCIAL POWER IN TERMS OF MOVING TOWARD (+), MOVING AWAY FROM (0), AND MOVING AGAINST (-) THE AGENT.\*

Source of A's power	Effects on B's			
	Overt behavior	Private beliefs	Interaction with agent	Identification with agent
Reward	+	0	+	0
Coercion	+	-	-	-
Legitimacy	+	+	0	0
Expert	+	+	0	0
Information	+	+	0?	
Referent	+	+	+	+
Illegitimate reward	+	-	+	-
Information coupled with need for independence	-	+	0	-
Unsuccessful attempt to use reward	0	-	-	-

\* From Raven, B. H. and Kruglanski, A. W., "Conflict and Power," in Swingle, J. The Structure of Conflict, Academic Press, Inc., New York, 1970, p. 79.

In the Soviet Union, in spite of a less than desirable standard of living and a less than enviable record in terms of human rights, somehow the regime has managed to capture the loyalty and fervor of the masses. In a recent Newsweek article describing a Westerner's journey through the U.S.S.R., the writer observes, "In common with most foreigners who do manage to meet ordinary Russians, I had found everyone I met to be loyal communists...(who believe) 'In our country, all roads are open to the young.'"<sup>80</sup> This attitude can be explained in part as due to ignorance of alternatives, some to coercion and threat as previously mentioned; and there is no doubt that there are many who have

privately "moved against" the control agent, or at least covertly disagree with certain aspects of the regime. Yet the regime's remarkable success in instilling desired attitudes still cannot be denied, and an attempt must be made by the West to understand how such powerful control has been established among, and internalized by, the Soviet people.

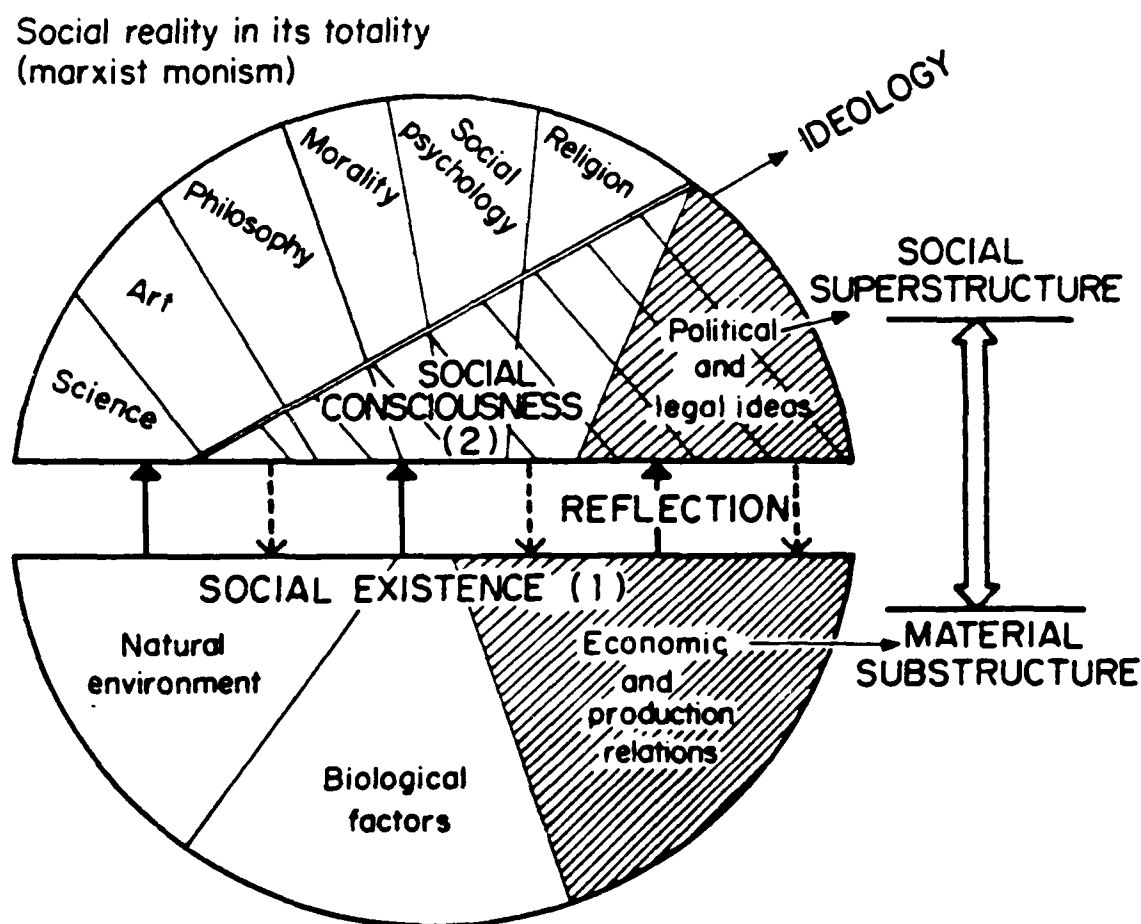
## 2) The Importance of Cognition and Reflection

It is the hypothesis presented here that much of the success of Soviet control can be explained in terms of the concepts underlying the theory of reflexive control. Part of the reason that reflexive control, and even the Soviet emphasis on control in general, has been underemphasized by Western observers for so long stems from our lack of familiarity with the importance given by Marxists to the concepts of consciousness, cognition, and reflection. Kubalkova and Cruickshank have noted that, "although the Marxist-Leninist emphasis on consciousness, social existence, among other concepts, brings with it its own uncertainties it has not gained the attention in the West that it deserves...."<sup>81</sup> Figure 9 shows in detail how consciousness is derived from social existence (equivalent to "objective reality") through the process of reflection. There is no comparable concept in Western philosophy, and a little description here will serve to underscore this point. Without a greater understanding of the importance of reflection to Soviet thought, the Western observer cannot hope to grasp the theory of reflexive control.

In the Soviet view, as best expressed in the Marxist-Leninist paradigm, cognition results from the reflection of the material world in the human mind, which determines "social consciousness." Man's intelligence and cognitive processes are dependent on his sensory awareness of the outside world, which in turn determines the content and the dimensions of his consciousness--in Lenin's



FIGURE 9. MARXIST-LENINIST "GNOSEOLOGY"\* (THEORY OF KNOWLEDGE)



\* From Kubalkova, V. and Cruickshank, A. A., Marxism-Leninism and Theory of International Relations, page 67.

words, "...Sensation is actually a direct link between consciousness and the outside world, the conversion of the energy of an external stimulus to a fact of consciousness."<sup>82</sup> (As shown in Figure 9, this is a monistic construct in which influence flows in both directions, from the substructure to the superstructure and vice versa). Hence, it is clear that, in the Soviet view, control over a human being would best be exercised by purposefully influencing the inputs he receives from his environment (i.e., through purposeful manipulation and management of perceptions). As E. T. Hall has stated:

...deep cultural undercurrents structure life in subtle but highly consistent ways that are not consciously formulated. Like the invisible jet streams in the skies that determine the course of a storm, these hidden currents shape our lives, yet their influence is only beginning to be identified.<sup>83</sup>

It stands to reason, therefore, that whoever has greater awareness of these "jet streams" and is able to influence the form that they take will have a very powerful tool in his hands indeed. Soviet leaders believe that the dialectical process of development can be "accelerated" scientifically by guiding man's sense perceptions to reflect "objective reality" as perceived and defined by the Communist Party (the concept of "Partiinost"). Perceptions not corresponding to this image of reality are consequently denounced as "idealist," "subjectivist," "relativist," or any of a number of other terms identified as regressive. The more firmly beliefs such as these can be embedded in the cultural context within which decision making occurs, the greater societal control becomes. Herein lies the essence of reflexive control when it is directed at "allies" as opposed to at adversaries.

As a result of the great Marxist-Leninist emphasis on reflection it can almost be said that reflexive control represents a natural extension and refinement of the concept of reflection. Rather than merely acknowledging and

accepting the basic influence of the environment on human thought processes, the Marxist approach would be to take the process one step further and actively attempt to influence and control the "arena of cognition" or the "cognitive map" of one's ally (or adversary) in order to more predictably reach one's desired ends. Generals Druzhinin and Kontorov appear to have hit upon a key principle behind the development of reflexive control when they state:

A leader should control, not only the actions, but the thinking of his subordinates, directing it so that the collective participates in the formation and elaboration of ideas. This is one of the main functions of a leader.<sup>84</sup>

### 3) Cognitive Arenas Influenced by Reflexive Control

There appear to be certain areas of belief, in particular, in which this method of conveying specially prepared information to influence the decision-making process toward predetermined, desired ends has been of exceptional utility to the regime. The first has been in reinforcing the feeling of need for authority and a craving for command by a father or father figure--what has been referred to as the "Little Father System" of government. It is said that the Soviet Union represents the only developed country in the world today in which this form of government predominates. As Erich Fromm suggests in his book Escape from Freedom, once the habit of subservience has been firmly established in the psyche, responsibility for the self and individual choice can become almost unbearable burdens for a person who truly believes he is dependent on a control agent for his very survival.<sup>85</sup> It has even been speculated that the return of Svetlana Stalin to her homeland after a seventeen year exile in the West contained elements of this desire to "escape from freedom."<sup>86</sup>

The second area of belief which seems to carry the mark of reflexive control has to do with the inevitability of Communism. Mehnert has made the following observation in this regard:

There are, of course, millions of people in Russia (sic) who are unhappy under the present system, and there are some who hate it. But since they have accepted that mankind must inevitably pass through a period of socialism, they tend also to accept the inevitability of the conditions under which they live. This attitude is invaluable to the Soviet authorities; for who can fight, with any prospect of success, against the absolutely inevitable? And who, indeed, would waste time complaining about it? Man finds it easiest to accept the things that seem immutable....<sup>87</sup>

Those citizens who are not won over through the influence of sacrosanct authority and dependency on a "Little Father," are therefore captured on a slightly different, more intellectual level by this dialectical argument in support of the inevitability of Communism. This ideological precept appears also to have fulfilled the people's "traditionally Russian" desire and quest for simple explanations. What could be more straightforward than the thesis that the evolution of society is governed by specific laws, exactly as is the development of all forms of natural growth? According to this Marxist theory, has progressed and is progressing from its primitive origins to slave-owning society to feudalism to capitalism to socialism, and ultimately to communism. This belief has been widely accepted by the Soviets, with the result that in the eyes of many even a poorly functioning socialism with all its subsidiary irritations, appears "higher" than the smoothest running capitalist system. Here is a practical example of reflexive control in action--it has influenced the cultural complex within which decisions are embedded, hence setting up the "arena of cognition" or "cognitive map" in such a way that the decision the leaders want the people to reach is the decision which is reached in the vast majority of cases (see Figure 10 and Figure 11).

FIGURE 10. TARGETS OF REFLEXIVE CONTROL

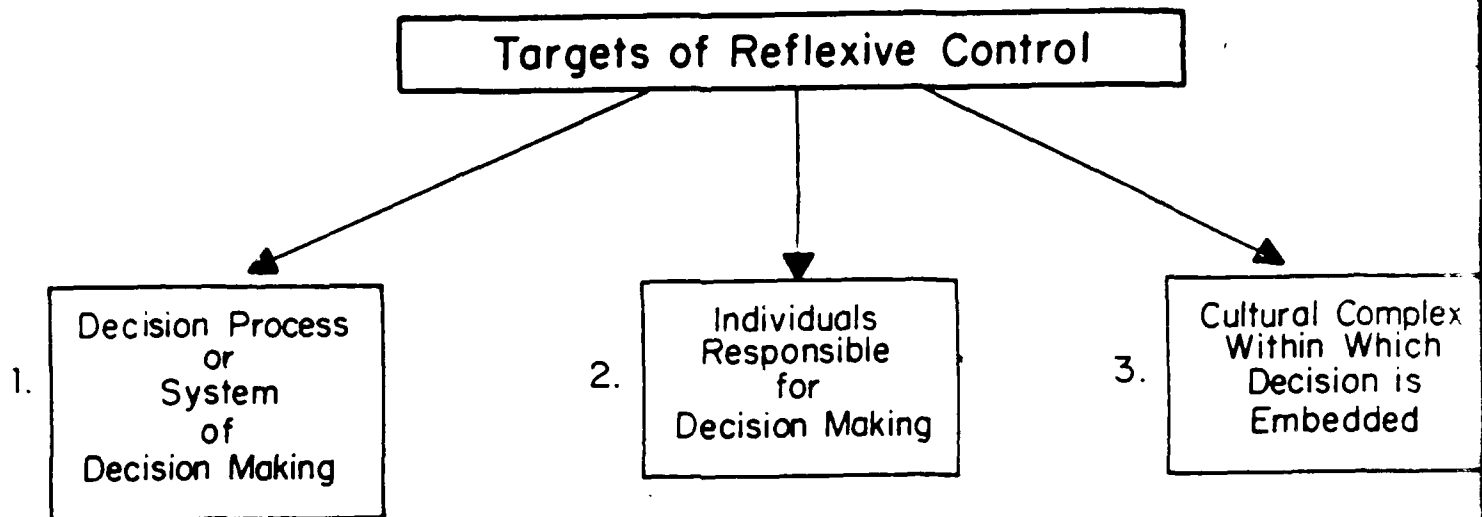
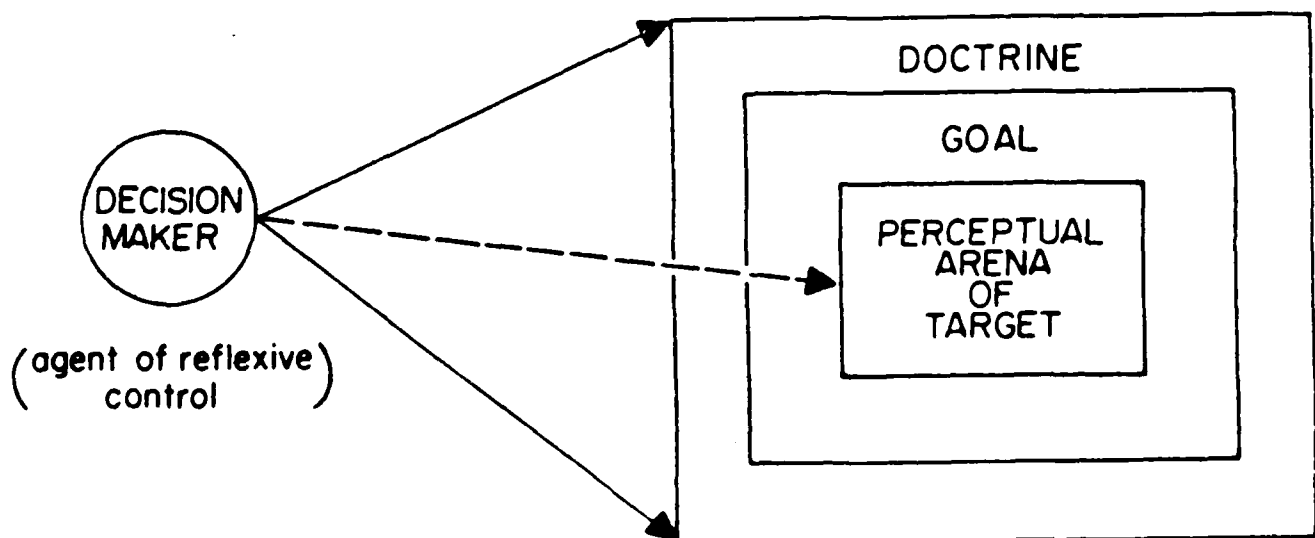


FIGURE 11. REFLEXIVE STRUCTURE OF THE TARGET OF REFLEXIVE CONTROL



The third major area in which it appears that reflexive control has played a part in setting up the cognitive arena of the Soviet people has to do with the concept of "threat." Since its earliest days:

The Soviet regime has developed the exploitation of external danger to the level of an art...capitalist encirclement has been much more than an occasional propaganda weapon in the armory of Soviet communism. It has been a continuous theme in Soviet internal and external politics, an invaluable means for whoever holds power in the U.S.S.R. to suppress opposition and dissent.<sup>88</sup>

Again, pre-Bolshevik historical experience has been conducive to the development of a "siege mentality"--the flatness and openness of the Russian landscape has, since the beginning of history, invited invasion and necessitated a state of hypervigilance and suspiciousness of outsiders among the inhabitants. These predispositions have been exploited fully by the Soviet leaders who have always described the world as made up of two hostile camps: the socialist camp holding the answers to humanity's problems; and its irreconcilable enemy, the capitalist system, intent on the oppression and destruction of the socialist hope for the world. From Stalin's vision of "capitalist encirclement" to the present regime's emphasis on "Reagan the warmonger," the Soviet people have been inundated with the belief that the true threat to peace and to their very existence lies in the capitalist governments in the world, with the United States maintaining the position as prime enemy of the Soviet people.

In this way, every denial of internal freedom and each restriction of the Soviet citizens' liberties can be ultimately rationalized by this image of the world divided into two hostile camps in which the forces of light--communism--are forever struggling with those of darkness--capitalism--in a battle that never abates, even when relations between the two countries appear most cordial. It is interesting to note how deeply and sincerely the average Soviet citizen

believed that his leader, Chernenko,\* represented peace and moderation in the world, whereas the leader of the U.S. and other Western statesmen actively advocate war and injustice.<sup>89</sup> In the publication, Whence the Threat to Peace, the Soviets assert that:

The U.S. military strategy embodied in multioperational plans for waging aggressive war to attain the global goals of U.S. imperialism, and the large scale preparations of the material facilities for war, including one with unlimited use of nuclear weapons, are a danger to peace and are pushing mankind to the brink of catastrophe.<sup>90</sup>

while insisting simultaneously that:

The Soviet Union and other socialist countries are doing everything possible to preserve and strengthen peace, to rid humanity of the threat of nuclear war, to establish equal and mutually beneficial cooperation between countries.<sup>91</sup>

In this work, as elsewhere, Konstantin Chernenko is consistently cast as a man of goodwill striving for world peace, whereas Ronald Reagan is portrayed as an aggressive warmonger, intent on the annihilation of the Soviet Union.

The importance of enemies and of "dark and sinister forces" is stressed both in traditional Russian folklore and in the Soviet view of historical development, which is amply illuminated and dramatized by the existence of "Trotskyites," "fascists," "capitalists," and "revisionists." There appear to be deep psychocultural factors at work here which have set the stage for the predominance of these feelings by developing or inculcating distinctively Soviet personality traits. These personality traits, in turn, have played a major role in the development of the Soviet emphasis on control, in general, and the extension of control to include reflexive control, in particular, and for these reasons are worthy of more in-depth analysis at this time.

\* Based on publications prior to Chernenko's death in 1985 (the emulation is attached more to the leadership position held than to a particular individual).

#### 4) Psychocultural Theories and Their Relation to The Development of Reflexive Control Theory

Personality traits are generally regarded as arising from a combination of child-rearing experiences, preadult learning, hereditary factors, and, in the Soviet case, the personal experiences of adult individuals within the regime. In an effort to explain the psychological development of Russian national character--in which guilt, group pressure, moral responsibility, and destructive defense mechanisms are seen as playing key roles--several interesting psychocultural theories will be examined.

##### a) The Swaddling Theory and "Polarized Opposites"

One of the most controversial of these theories is based on the "swaddling hypothesis" espoused by Gorer, an anthropologist/psychologist, and Dr. Rickman, who practiced medicine in the Soviet Union from 1911 to 1918. They concluded from firsthand observation that the common Russian peasant practice of swaddling infants during their first year of life provided some definite clues to Russian personality development. According to this practice, still employed in the U.S.S.R. today, the peasant infant is tightly swaddled with legs pulled straight and arms to his sides. Although some degree of swaddling is often recommended to invest an infant with a sense of security and well-being, this extreme Russian form engenders a condition of complete constraint and absence of gratification. The infant is often swaddled for the greater part of the day--aside from short respites during feeding, changing, and bathing periods--and during this time he can express his emotions only by moving his eyes and, if not inhibited by the presence of a pacifier, by screaming. The infant swaddled in such a way is said to experience "intense and destructive" rage as a result of this complete inhibition of movement.



By means of the defense mechanism of "projection,"\* as explained by Gorer and Rickman, the infant is believed to attribute its own thoughts and wishes (preverbal though they may be) to "vague figures" in the environment, and to fear retaliation if it should attempt to gratify its own destructive urges. The reality of swaddling makes it impossible for the infant to gratify these alleged destructive wishes and he is thereby spared from the retaliation he is believed to fear. However, the argument asserts that most Russians manifest "diffuse unconscious feeling of guilt coupled with fear" as a result of this early childhood experience characterized by the projection of infantile hostility. This alleged presence of a "free-floating unfocused hostility" in the Russian people is said to have been reinforced by the Soviet regime in directing popular hatred toward various countries, class enemies, warmongers, alleged aggressors, and other adversaries, as the occasion dictates.<sup>92</sup>

Swaddling is also believed by many to represent the prototype for the existence of "polarized opposites" or ambiguous traits in the Russian national character. In this view, Russians are seen to be programmed for life to oscillate between emotional extremes due to the infantile experience of complete constraint alternating with gratification. Hingley has poetically described this condition as that of a "mummified infant periodically unwrapped for a delicious romp."<sup>93</sup> Some of the dichotomous, ambiguous traits most often noted in the Russian modal personality include: recklessness versus caution; tolerance versus censoriousness; love of freedom versus slavishness; productive activity versus inactivity; and kindness versus cruelty. A British psychiatrist, Dr. Henry V. Dicks, contended that the less attractive features of the Soviet regime are made tolerable by means of "backsliding," and by

\* The defense mechanism of projection is defined as, "the attribution of one's own ideas, feelings, or attitudes to other people or to objects; especially: the externalization of blame, guilt, or responsibility as a defense against anxiety."<sup>94</sup> [The next subsection will cover projection in greater depth].

various forms of oral gratification, particularly the abuse of alcohol.<sup>95</sup>

Russian tendencies toward recklessness, and addiction to extremes of sensation (often referred to as the "oral-anal conflict"<sup>96</sup>), find their most characteristic expression in the excess consumption of alcohol--"traditionally the besetting sin of the Russians."<sup>97</sup> This is a problem of severity which has persisted throughout history, and continues to plague the Soviet regime in spite of stringent attempts to counteract its tenacity.

Whether one attributes the existence of polarized opposites (which has been well documented) to the swaddling hypothesis (less scientifically accepted) or to the traditional Russian patriarchal family structure, or whatever other possible cause, is not the essential issue. It is clear that greater understanding of this aspect of the Russian and Soviet experience will undoubtedly aid the Westerner in better understanding Soviet behavior and decision making patterns, especially in the area of recklessness-caution and its relationship to combat situations [For an interesting perspective on this topic, please see the authoritative work, Soviet Risk Taking and Crisis Behavior by Hannes Adomeit.]<sup>98</sup>

#### b) The Role of Projection and Related Defense Mechanisms

In light of the presence of polarized opposites in the Russo/Soviet experience, the prevalence and role of psychological defense mechanisms such as projection, reaction formation, and displacement becomes clearer.\* It stands

\* Reaction formation is defined as: going to the opposite extreme; overcompensation for unacceptable impulses. Example: a person with strong anti-social impulses leads a crusade against vice. Displacement is defined as: a change in the object by which an instinctual drive is to be satisfied; shifting the emotional component from one object to another. Example: a salesman is angered by his superior but is required to suppress his feelings; upon returning home he vents his frustration on his children for misbehavior that would usually be tolerated. Projection, reaction formation and displacement are mechanisms which aid in repression--the removal of conflicting elements from consciousness (i.e., reduction of cognitive dissonance).<sup>99</sup>

to reason that such diametrically opposed character traits will lead to a feeling of discomfort among those possessing them. In psychological terms, this condition of psychic discomfort is known as cognitive dissonance.

Cognitive dissonance is defined as a psychological tension arising from discrepancies between aspects of the individual's self-concept (both conscious and unconscious) and his actual behavior, or from incongruous beliefs and attitudes held simultaneously. A Soviet example of a situation involving cognitive dissonance might be the case of a worker who has internalized the communist ideals of hard work, service, and productivity and yet continues to report to work drunk on a regular basis.

The relationship between any two cognitive elements must be one of the following: consonant--in agreement with expectations; dissonant--opposed to expectations; or irrelevant--having no bearing on expectations. The magnitude of the dissonance experienced is seen to be directly dependent on the number and/or importance of dissonant cognitions relative to the number and/or importance of consonant cognitions. The greater the number and/or importance of positive attributes (consonant cognitions) associated with a chosen alternative, the less the magnitude of dissonance resulting from a choice.<sup>100</sup> In the case of diametrically opposed tendencies such as kindness-cruelty and tolerance-censoriousness, as found among Soviets, it appears that the magnitude of cognitive dissonance would be quite high and some means of reducing it would become necessary for psychological well-being.

Festinger, a pioneer in the study of cognitive dissonance, surmised that one possible way (probably the most common) to reduce dissonance is by attributing the elements causing dissonance to others, i.e. through the mechanism of projection. He felt that the magnitude of dissonance, and the consequent

projection and paranoia resulting therefrom, could be a function of the size of the discrepancy between the way a person behaves and feels, i.e., his actions and emotions, and what he thinks of himself, i.e., his self-esteem. It was discovered through experimentation that an identifiable projection effect tended to occur mainly when self-esteem was exceptionally high.<sup>101</sup>

This finding correlates well with the presence of projection among Soviets who, by virtue of the superiority of Marxism-Leninism, are socialized and taught to believe in themselves as persons of worth connected with a valuable historical development and having a *raison d'etre*--the communist cause. Thus, hostility toward out-groups, which the regime encourages by fostering a "siege mentality" (see pages 49-50), is further reinforced by natural, culturally based tendencies toward a defensive posture involving projection. In Algebra of Conscience, Vladimir Lefebvre makes the point that a "hero" of the second ethical system is one who is aggressive, tends toward conflict, minimizes his guilt feelings, and has a high self-evaluation (see Figure 12 below). He reinforces this point by explaining that the "Moral Code of a Builder of Communism," published in 1962, openly and obviously

**FIGURE 12.** DESCRIPTIONS OF THE TYPES OF NORMATIVE INDIVIDUALS IN BOTH ETHICAL SYSTEMS\*

Philosophy		First ethical system	Second ethical system
		End does not justify means	End justifies means
Sacrificial individual	Saint	Non-aggressive: tends toward compromise with a partner; has low self-evaluation	Aggressive: tends toward conflict with a partner; has low self-evaluation
	Hero	Non-aggressive: tends toward compromise with a partner; has high self-evaluation	Aggressive: tends toward conflict with a partner; has high self-evaluation
Non-sacrificial individual	Philistine	Aggressive: tends toward conflict with a partner; has low self-evaluation	Non-aggressive: tends toward compromise with a partner; has low self-evaluation
	Dissembler	Aggressive: tends toward conflict with a partner; has high self-evaluation	Non-aggressive: tends toward compromise with a partner; has high self-evaluation

\* From Lefebvre, V. A., Algebra of Conscience, page 84.

requires a good communist to be intolerant toward and irreconcilable with his enemy.<sup>102</sup> Thus, it can be seen that cognitive elements which threaten to lower self-esteem are much more likely to be rejected, repressed, or projected onto others among Soviets than among Westerners who--in accordance with the Christian moral tradition--have greater tendencies toward acceptance of self-doubt, repentance, and guilt.

These tendencies become useful tools in the hands of Soviet propagandists who are well aware of this Soviet-Western distinction. It is interesting to note in this regard that the Soviets accuse Americans of subversive tactics, violations of human rights, and aggressiveness while asserting exemplary moral behavior on their own part, although this assertion has clearly not been borne out in reality (see pages 33 and 46). This provides a perfect example of the use of projection to protect against cognitive dissonance which threatens self-esteem. Raven and Kruglanski highlight another important cognitive feature reinforcing the need for projection against the West by the Soviets when they state:

...a side endowed with destructive capacity may come to believe that he will actually employ it against the other party. In the interest of cognitive consistency (author's underline) these beliefs may lead him to attribute negative intentions and characteristics to the other party. The above "psychologic" may be represented by the cognitions: "I have (acquired) the capacity to inflict damage on X... (therefore) I shall probably use it against X...because this is the only way it is possible to deal with a person like X, an obstinate, unreasonable, hostile, individual....<sup>103</sup>

What is it in the Soviet experience which brings about a condition of cognitive dissonance to begin with? Reshetar makes the point that many of the anal traits of the Soviet regime such as punctuality, orderliness, and discipline have not been congenial to the Russian cultural pattern with its

tendencies toward more oral characteristics (impulsiveness, emotionality, inactivity). These characteristics have had to be instilled in the population by control, both in a reflexive sense--that is, through the induction of correct behavioral traits cognitively--and through overt force and coercion. In certain respects Bolshevism has waged war against the Russian modal personality, but not entirely successfully.

To return to our example of the drunk worker, it can be said that he is experiencing a conflict between his Russian cultural tendencies and the Bolshevik "operational code." This code advocates control of emotions and feelings, condemns passivity and "emotional incontinence" (such as abuse of alcohol) and, interestingly enough, is itself viewed as a reaction formation by Lenin and his fellow Bolsheviks who are said to have 'reacted in opposition to certain qualities of the Russian intelligentsia that they regarded as harmful.'<sup>104</sup> This type of conflict brings about the condition of cognitive dissonance. As was seen in the case of the swaddled infant (see page 48), psychic conflict can be successfully diffused by attributing the elements causing conflict to others. However, the drawback of this mechanism is that it leads to an increase in anxiety due to fear of retaliation, and consequently to an increase in paranoia and hostile feelings. Because of the somewhat ambivalent nature of the relationship of the elite to the masses (which will be discussed in greater detail in subsection d.), projection is often initially focused on the Soviet elite. The major task for the leaders of the regime is therefore to effect a transfer of the "we-they" dichotomy (which sometimes results) onto external others, as opposed to themselves, and to foster an identification of the masses with the communist cause.

To illustrate the operationalization of this mechanism, let us continue

studying the example of the drunk worker. The worker has a cultural predisposition to abuse of alcohol which is enhanced by poor working conditions in his factory and a psychological predisposition toward the defense mechanism of projection. He diffuses his psychic conflict by projecting it initially onto his supervisors, the communist regime, etc. Through skillful political education combined with the worker's awareness of the realistic danger of expressing hostile feelings toward those in power, his projection becomes transferred from the communist leaders to, for example, the "capitalist oppressors." He may be told that conditions are poor for himself and all workers in the world because of imperialist exploitation and injustice, or something to that effect. The worker comes to project his hostility against these targeted outside forces and to identify more and more with his leaders (although some remnants of hostility tend to remain, thus reinforcing the need for constant surveillance and control). For the most part, however, this mechanism appears to be quite successful in reinforcing loyalty toward the in-group (the U.S.S.R./communist regime) and hostility toward the out-group (the outside world, especially the West). As Goldman points out:

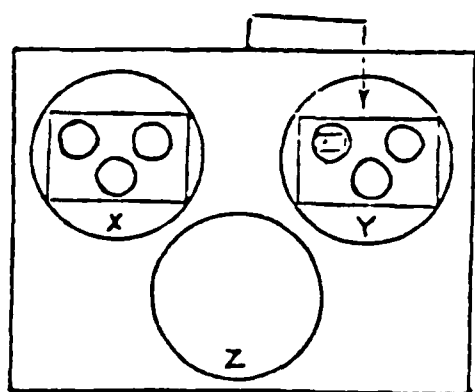
...no one disputes the fierce chauvinism that the Russians in particular, but even many minorities, have for the Soviet Union, especially when it is the Soviet Union against some foreign country. Few peoples of the world are so loyal in such circumstances.<sup>105</sup>

This follows the cognitive dissonance principle that when some dissonance remains, and, in the absence of refutation of the discrepant information, one means of reduction is to try to see others as similar, i.e. through identification.<sup>106</sup>

Cognitive dissonance is a very complex subject which is of great interest to those concerned with the psychological dynamics underlying reflexive control.

The important point which is elucidated by viewing the subject from a cognitive dissonance perspective is that projection (and related defense mechanisms) induces and maximizes "hypervigilance" and a consequent emphasis on the importance of control, as well as consciousness of the existence of reflection and "multiple-tier awareness"--a term Lefebvre utilizes to describe a person's direct awareness of his own "inner world," his awareness of his awareness of his inner world, coupled with an image of someone else's inner world, an image of someone else's image of his inner world, etc., as illustrated in Figure 13.<sup>107</sup> Multiple-tier awareness is a key concept in reflexive control theory, and also serves to emphasize why the systems approach--in which everything is seen to be related to and to effect everything else (in this case, the individual's interaction with and awareness of other individuals)--is held in particularly high esteem in the Soviet Union.

FIGURE 13. MULTIPLE-TIER AWARENESS\*



The cognitive arena is represented by the rectangle. The 3 individuals X, Y, Z by the 3 circles.

X, Y, Z must construct a model of the situation. They will have an awareness of their own models. In addition, Y may also be aware that X has a model of the situation. Z, in turn, may be aware that the inner worlds of X and Y are structured in a particular way--this is multiple-tier awareness.

In order to correctly interpret the actions of another, one must take into account these reflexive constructions.

\* Derived from Lefebvre, V. A., Reflexive Control: The Soviet Concept of Influencing an Adversary's Decision Making Process, pages 35-37.

The Soviet regime has proven itself particularly adept at harnessing these different concepts, including the projection mechanism inherent in the



Russian mindset, and using them to successfully further its own ends. This fact seems to point out a lucid awareness of, and ability to put to use, the concept of "multiple-tier awareness;" as well as showing the importance given by Marxists to the concept of "consciousness"--a thorough and rational knowledge and awareness of the role one is playing. This knowledge has been applied with particular efficacy to further control by encouraging an identification with and an idealization of "the leader" (vozhd), a control mechanism of central importance which will now be discussed in greater detail.

### c) The Psychological Importance of "The Leader"

This is a theme which reappears constantly and repeatedly "across the board" in literature dealing with the Russian mind or Soviet psychological makeup, and is, in fact, at the root of any study relating to the subject of control. The subject of leadership has already been alluded to several times in this report, but because of its extraordinarily pervasive influence it becomes necessary to once again emphasize its significance.

It appears that the existence of polarized opposites has also served to reinforce in the Russian consciousness this recognition of need for authority and a tendency to idealize their leadership, whether that of the autocracy or of the Communist Party today. In Gorer's view, Russian psychological well-being is dependent on the preservation of one figure\* (or an elite group) that is believed to be uncontaminated by suspicion, fear, and guilt. An idealized and strong leadership, even though often arbitrary and coercive, has thus been acceptable to Russians as a necessary safeguard against anarchy and their own guilt and excesses--"a moral corset" so to speak, which no

\* See page 50 regarding the idealization of Chernenko.

doubt has its historical roots in the heavily emphasized conditioning effect of the "Tartar Yoke"\* experience.<sup>108</sup> The willingness to surrender personal freedom has thus been compounded by the infusion into Russian blood of what a few Russian intellectuals describe as the Mongol acceptance of brutality or "the Mongol inheritance."<sup>109</sup>

Soviets are said to be highly cognizant of the need to control impulses, and yet to rely less on self-control for this purpose and more on impulse control resulting from guidance and pressure exerted by a higher authority. The principle of edinonachalniye (one man control) provides a military example of this concept of centralization of authority."<sup>110</sup> Urie Bronfenbrenner, in his landmark study comparing the upbringing of Soviet and American children,<sup>111</sup> also stresses the important role played by leaders in inculcating the crucial trait of obedience (poslushanie). Soviet literature on child rearing sets forth the "active guidance" of parents (in the home), professionals (in the day care centers), and people in general (society at large) as the most effective method to instill traits of obedience and self-discipline (referred to as "internalized obedience"). As opposed to the West, there is very little stress placed on the development of independence, initiative, or individuality. He points out that the subject of correct upbringing (vospitanie) is virtually a national hobby in the U.S.S.R., so important is it believed to be to ensure the proper evolution of Soviet society. In the primary schools, the process is continued as leadership is gradually and carefully transferred into the hands of children who have proven themselves to be of "good Soviet character," capable of serving in the role of class monitors and Pioneer leaders. These children provide leadership and guide the behavior of their peer group, known as "the children's collective," in the proper socialist direction, as

---

\* See Appendix A(5)

illustrated in Figure 14. Reporting infractions by classmates is considered an integral and necessary aspect of the injunction to "be truthful."\*

Vladimir Lefebvre also points out the importance of the leader's role in exercising reflexive control. He states:

The reflexive concepts make it possible to describe the mechanism of leadership more precisely. While all members of a collective are operating with a reality, the leader operates with a special reality in addition--the collective. He projects this special reality onto a special plotting board: then he transforms this image into a certain plan, and fulfills it. The leader's plotting board must clearly show not only the special elements that reflect the activity of individual members of the collective, but also the elements of his own activity. The latter are the elements of planning the collective's activity....we can say that the basis of any organizational activity is the organizer's mechanism of reflection.<sup>112</sup> (author's underline)

This quotation pointedly delineates the vast difference between the Western perspective of the leader as an "influencer and moderator" of group decision making--an "example setter"--as opposed to the Soviet view of the leader as "sole formulator and controller" of group decisions and actions.

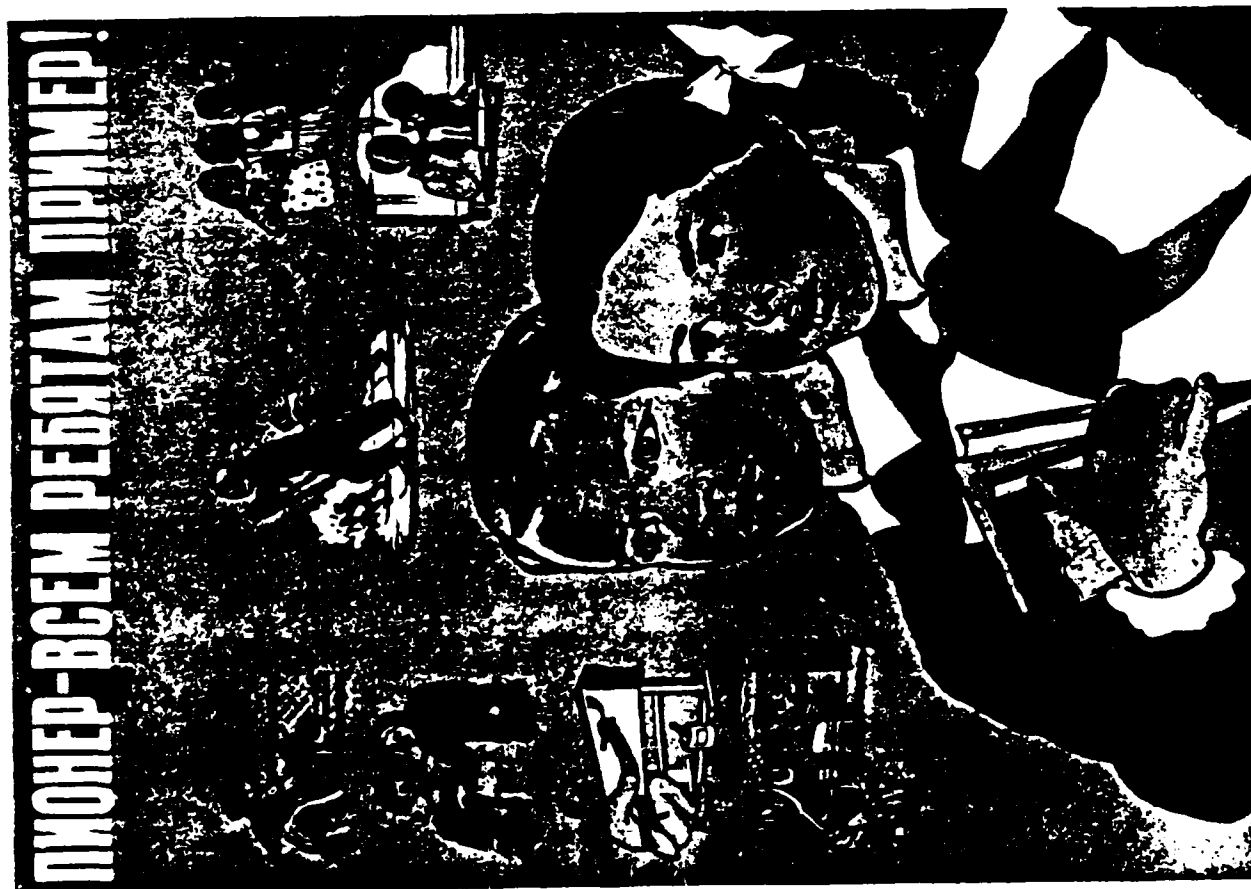
Hingley claims that no other factor more sharply differentiates the generalized Russian experience from that of the West than this attitude toward authority, coupled with a fear of freedom. In his view, the impact of authority has, in fact, grown ever more rigorous over the centuries, almost in directly inverse proportion to the decline of centralized power in the West.<sup>113</sup> This, in turn, has resulted in a high degree of submissiveness which, it is safe to assume, would greatly increase susceptibility to the influence of the control agent, thereby further strengthening the authority of the leadership. However, the question of which influence came first will more than likely remain an enigma. As Hingley muses:

---

\* See Appendix A(6).

FIGURE 14. THE IMPORTANCE OF LEADERSHIP PERMEATES ALL LEVELS OF SOVIET SOCIETY\*

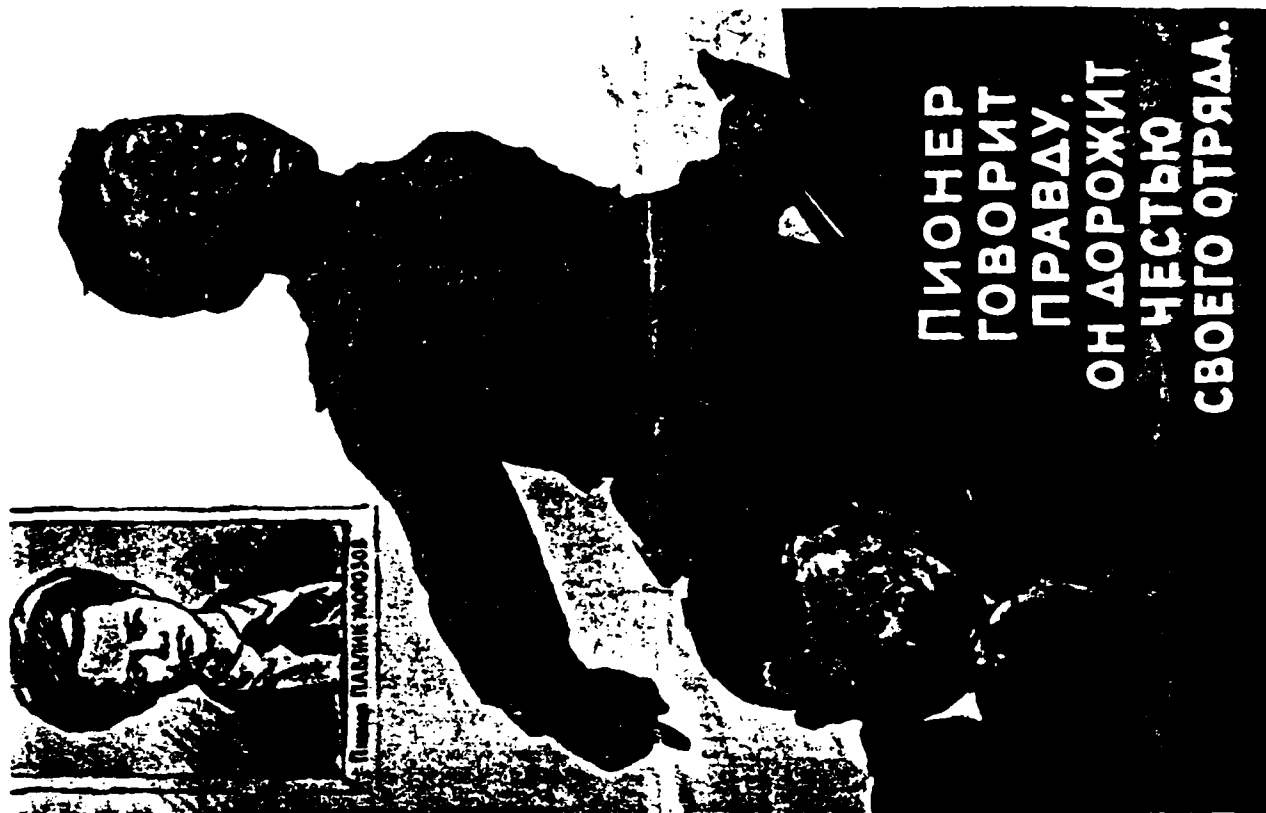
Laws of the Pioneers



A Pioneer is an example to all children.

\* From Bronfenbrenner, Urie, *Two Worlds of Childhood: U.S. and U.S.S.R.*, pages 44, 46

Laws of the Pioneers



A Pioneer tells the truth and treasures the honor of his unit.

Must one then conclude that it was the Russian mind which molded the Authoritarian state? Or is the Russian mind rather the outcome of that Authoritarian state? All one can assert with confidence is that the two phenomena have interacted as intimately as any chicken and egg.<sup>114</sup>

A similar paradox underlies and complicates much that is being examined in this paper. Most specifically, it is of utmost difficulty to conclusively determine whether reflexive control is a cause or an effect of the Soviet social environment. Further research may bring us closer to a resolution of this paradoxical question.

In any case, it can be seen that the psychological importance of the leader is an almost universally accepted principle in the U.S.S.R., and one that relates directly to concepts of control, the control agent, and to the development of reflexive control theory. This is not to say, however, that the relationship between the leaders and the masses has been straightforward and nonproblematic, and this complication will be expanded upon in the following subsection.

d) Lozh and Vranyo: The Russian Heritage of Prevarication

A complete understanding of Soviet social and psychological dynamics is further undermined (although the thesis of this paper is strengthened) by the pervasive and historically documented Soviet tendency toward misrepresentation, cover up, and prevarication. Hingley points out that the Russian language includes an extensive vocabulary of terminological inexactitude, which he views as being grounded in the country's history of dealing with a harsh reality:

For ages the peasantry were exposed to the arbitrary power and ruthless exactions of those who were placed over them; and as the law gave them no means of legally protecting themselves, their only means of self-defense

and deceit. If ordinary Russians have for centuries lied to their authorities, those authorities have been in no position to complain, owing to the high degree of institutionalized mendacity which they them-selves have practiced and which has not been calculated to set a good example to the lower orders.<sup>115</sup>

He characterizes Russian civilization as containing an element of pure play-acting, stating that the very possibility of any human reaction not being dictated by "deep-laid guile" is an alien concept in the Russian mindset. He adds that a delicate reciprocity of deviousness is almost the first condition of Russian societal interaction, asserting for example that, "the Russians are much less interested in being civilized than in making us believe them so."<sup>116</sup> This notion would correlate well with the concept that the Soviets encourage a belief in external symmetry--that they are "just like Westerners"--in order to further their goals in international relations (see page 6).

How did these unique conditions arise, and what is their bearing on the concept of reflexive control? Beaumont asserts that:

Most elemental is the fact that the predisposition to such practices and the defense of them constitutes a commitment by the Soviets, albeit culturological or strategic, to the widespread and systematic use of deceit as policy, which makes appraisal of threat difficult and arms control efforts uncertain....<sup>117</sup>

The ambiguous, complex structure of totalitarian government, and the relationship it engenders between the leaders and the masses accounts for much of the unique developmental pattern of Soviet society. As Hingley points out, "Russia has presented its sons and daughters with features markedly different from those conditioning their Western brothers and sisters."<sup>118</sup> The totalitarian apparatus of rigorous censorship, travel restrictions, thought control, and general surveillance of the citizenry has acquired the added obligation in

recent times to pretend that no such controls exist, that the Soviet citizen is actually freer than his Western counterparts.\* Since the establishment of Bolshevik rule there has resulted a dramatic upsurge in state authoritarianism, partially due to the adoption of a political program with claims to universal applicability. The emotional force of preexisting "Great Russian Messianism" has thus been incorporated into the doctrines of Marxism-Leninism. This, in turn, has resulted in a "two-compartment mentality" in which the private thoughts of an individual must necessarily be separated from the Party Line, which is often nothing more than "compulsory official mendacity" to manipulate perceptions to correspond with the Party vision of reality.<sup>119</sup>

The existence of "doublethink" (dvoemyslie) is thus a key concept. Much has been written about the historical preconditions of this attitude in Russia its psychological mechanism, and the deformation of character which may result, from it. Dvoemyslie refers to conscious conformity; living contrary to one's convictions; or adaptation out of necessity, convenience, or careerism. Many consider doublethink, combined with public immorality and the all-pervasive dialectic approach, to be the true, unshakeable foundation of the system; a foundation deeply rooted in the mentality of the masses. Solzhenitsyn sees dvoemyslie as an exclusively moral problem, a problem of the second ethical system on which the present Soviet system appears to be based.<sup>120</sup>

To understand this development historically, it is important to become familiar with the Russian terms lozh and vranyo, two of the most common terms of inexactitude in the language. Lozh refers to actual lies and total untruths, whereas vranyo is a more subtle term referring to the dissemination of untruths which have some grounding in reality. Lozh appears to be less commonly accepted and practiced now than is vranyo, in spite of the centuries-

---

\* See Appendix A(7).

old belief held by many that Russians are hardened liars.\* Leonid Andreyev, a prerevolutionary short story writer and dramatist, made the following distinction between the two terms:

...the Russian is incapable of telling downright lies; but seems equally incapable of telling the truth. The intermediate phenomena for which he feels the utmost love and tenderness resembles neither truth nor lozh. It is vranyo.<sup>121</sup>

Since the death of Stalin, an era in which lozh played a dominant role, vranyo has been a key element in totalitarian public posture. Hingley claims that, "in no other state do political words stand in such contrast to reality as in Russia, (although)...it is common practice to dilute vranyo with injections of truth."<sup>122</sup> He goes on to describe how citizens are drilled in the "gentle art" of manipulating the perceptions of foreigners who, because they have traditionally been equated with authority have always activated the self-protective evasive tactics characterizing the peasant relationship with authority. Thus, vranyo has evolved into an institutionalized aspect of Soviet society: the leaders deceive the masses in order to influence their cognitive maps to view Soviet reality as they wish it to appear; the masses use subterfuge as a defensive measure when necessary in dealing with their leaders; and society as a whole exercises vranyo in its dealings with the outside world.

The corollary to the successful execution of vranyo is the need to maintain censorship and secrecy, in order that vranyo not be too obviously out of line with reality. An emphasis on obsessive secretiveness has persisted throughout the centuries, characterized by a strong tendency for all information about the country to be kept a closely guarded secret. Thus, Western analysts have been consistently frustrated in their efforts to better understand the Soviet mind by the elusiveness and deception inherent in this

---

\* See Appendix A(8).



cultural predisposition to employ lozh and vranyo. This results in a condition Hingley refers to as dubiety--the context of things not turning out as might be expected. This of course is a central aim of reflexive control--to keep the adversary confused, uncertain, and lacking in knowledge; thereby decreasing the effectiveness of his responses. It appears that a concept such as reflexive control could most easily take root and flourish in an environment where such elements as lozh, vranyo, dubiety, and secrecy are accepted, natural features of social consciousness. However, if the relationship between the Soviet rulers and the masses was not fraught with ambiguities and complexities, it is likely that reflexive control would not have developed as a means to maintain and reinforce societal control. Such is the paradox of Soviet cultural dynamics: on the one hand, they foster and require authoritarianism (fear of freedom, submissiveness, psychological importance of the leader). On the other, they require effective mechanisms (such as doublethink, censorship, reflexive control) in order to keep the authoritarian government afloat.

For the purpose of understanding the development of reflexive control theory, vranyo, in particular, appears to be an important concept for two reasons: 1) to be effective, reflexive control, like vranyo, must have some grounding in reality so that it can enter and effect the target's cognitive arena without setting off his alarm systems; and 2) vranyo, as is true for reflexive control, is a two-way process in which the relationship and interaction between the purveyor and the recipient is of the essence (again touching upon the concept of multiple-tier awareness). The greater the decision maker's understanding of his target's cognitive map, the greater the effectiveness of both vranyo and reflexive control.

5) Looking Outward--The Concepts of Maskirovka, "Finlandization," and Risk-Aversion/Redundancy

Thus far the major focus of this study on "Origins" has been on control factors as they relate or have related internally to the Soviet people, i.e. as they have been directed at "allies" or potential allies. Our attention must now necessarily expand outwardly to consider the ultimately important question of how the Soviets have attempted to exercise control externally, to influence and disrupt the goals and actions of "adversaries." In addition to the use of propaganda as a means of disseminating effective disinformation (dezinformatsiya) as previously discussed in Section II.C., there appear to be three other factors which must be examined in an attempt to understand reflexive control directed against adversaries. These are: 1) Maskirovka--a technique with predominantly military applications; 2) "Finlandization"--in the realm of political and international relations; and 3) the Soviet penchants for risk-aversion and reliance on redundancy. These three concepts and their relation to reflexive control theory will now be discussed.

Awareness of concealment, camouflage, and deception is rather higher and more pervasive with the Soviet military than in the U.S. defense system. Maskirovka appears as an integral part of the strategies and doctrines as well as the tactics of the U.S.S.R. They believe in it, they study and develop it and they use it; therefore, it is a subject of considerable importance to the Western world.<sup>123</sup>

Maskirovka in the Soviet sense encompasses a broader spectrum than does the more straightforward American concept of camouflage in combat, although the two terms are often mistakenly equated. It is most accurately defined as camouflage, concealment, and deception (C, C, & D). The major purpose of Soviet maskirovka is to warp the enemy's view of their combat missions,

positions, and objectives, as well as to alter perceptions of the reality of the battlefield situation by following the doctrinal tenets of maskirovka, namely: naturalness, variety, and unceasingness.<sup>124</sup> One important aspect of the Soviet view of maskirovka, which is also crucial to their perception of reflexive control, is that, in order to be effective, whatever is done must appear as highly plausible to the enemy, and conform to both his perspective on Soviet doctrine and to his strategic assumptions. The concept of strategic assumptions is extremely important to developing an understanding of reflexive control methodology. As Gerald Hopple has pointed out:

...strategic assumptions often emerge as genuine causal forces in a nontrivial way. When strategic assumptions account for surprise attack, they do so as necessary (if not sufficient) determinants....Strategic assumptions are almost invariably plausible--at least before the fact. They are also often reinforced by the other side's active deception....People naturally become wedded to their basic beliefs and vigorously resist their elimination. This unwillingness to look at evidence in the light of alternative beliefs leads to warning disasters.<sup>125</sup>

Maskirovka is thus used to gain advantage over an enemy by thwarting or distorting the accuracy of his perceptions, thereby exercising control over his cognitive arena. Maskirovka can be performed on a tactical, operational, or strategic level depending on the needs and scale of the maneuver. Although Western observers have noted a substantial increase of interest directed at the subject of maskirovka in Soviet military circles since the 1970s, this subject has actually been of concern to the Soviets since the 1940s (and more than likely even prior to that). Two key military operations which had great impact on developing the Soviet mindset in regard to maskirovka were the German invasion of Russia in June 1941 and the Soviet invasion of Japanese-held Manchuria in August 1945. Memoirs of Soviet World War II officers also contain numerous examples of the use of maskirovka, particularly of a tactical

or operational nature, during their war experience [see Konev, I. (former Marshal of the U.S.S.R.), Year of Victory,<sup>126</sup> and Chuikov, V. I. (Marshal of the U.S.S.R.), The End of the Third Reich<sup>127</sup>].

Since that time, it appears that maskirovka has become a central theme of increasing significance and sophistication among Soviet military officials. As Beaumont states, "Soviet military power (has)...to be seen through the qualifying lenses of maskirovka-dezinformatsiya. To accept that fact is not to generate a high sense of anxiety, but prudence, and above all, to sensitize policymakers, commanders, analysts and battle controllers to a broad and strange landscape of uncertainties."<sup>128</sup> He also points out that a complete investigation of maskirovka should entail rigorous review of other disciplines viewed by the Soviets as related to it; such as the psychology of attention and perception, human factors, physiology, electronics and electrical engineering, and remote sensing (including optical).

It is clear that maskirovka and the broader concept of reflexive control are inextricably linked by many common features and are both worthy of greater attention from Western analysts. It has been noted that adroitness and craftiness run against Western traditions of linear warfare, and the Western search for solutions in technology and concentration of force. In the Soviet Union, on the other hand, "the very definitions of intervention and deployment are being altered in those areas which receive short shrift in American strategic deliberations and practices--psychology, propaganda, media analysis and control techniques."<sup>129</sup> Because the American style of intervention steers away from relatively subtle practices, we tend to be less aware of these vital nuances in the Soviet perspective, both on the military and the political front, and hence more vulnerable to potential manipulation.

The political counterpart to maskirovka appears to lie in the concept of "Finlandization." Briefly stated, Finlandization describes a process whereby the Soviet Union influences the domestic and foreign policy behavior of non-communist countries in a way that leads them to follow policies congenial to or approved by the Soviet Union.<sup>130</sup> (The term itself was developed from the country which has proved itself most susceptible to Soviet influence of this type). Totalitarian leaders enjoy an advantage in this regard due to their control over public opinion and sources of information. Schapiro claims that, "No Soviet leader...has failed to attach supreme importance to the battle for the minds of his opponents. It is toward this end that the whole machinery of state propaganda is directed...to neutralize or cast doubt on information about Soviet life or policy unfavorable to the Soviet Union."<sup>131</sup>

There are numerous examples of the effectiveness of Soviet attempts at the Finlandization of the West. Schapiro has made the interesting observation that the Western perception of threat in the 1960s and 1970s has been far less than in the 1940s and 1950s, notwithstanding the quantum growth of Soviet power, including achievement of nuclear parity with the U.S. and even military superiority in some areas.<sup>132</sup> It appears that public opinion in West Germany has been particularly targeted and influenced over the years. It is there that the demands for complete unilateral Western disarmament and an increasing anti-American sentiment have become strident and popular stands. An opinion poll conducted in 1984 to survey the views of 16- to 29-year-old West German youths revealed that only 25% felt democracy was worth defending if the choice were between communism and democracy; and if avoidance of war meant the Soviet Union taking over Western Europe, then 56% wanted to avoid war at all costs. John Vinocur, a journalist, describes the situation thus:

In West Germany, where three decades of U.S. officials thought their view of democracy had taken hold; a... group of intellectuals, with a national audience and national impact, were speaking in another tonality: America as aggressor, America as polluter, nuclear terrorist and profiteer; America as the force-keeping-us-from-the-way-we-want-to-be.<sup>133</sup>

Of course, it is very difficult to prove that the Soviet Union itself has played an active, conscious role in altering or effecting perceptions in this way;\* but, as Rubinstein has pointed out (as well as Beaumont, see Appendix A(1)) a visible Soviet presence is not necessarily a prerequisite to effective manipulation:

If the Finlandization of the West should come to pass, it would be a consequence not just of Soviet strength but also of Western weakness--debilitating domestic policies, intra-alliance bickering, a contraction of power under the guise of advancing detente, and a lack of commitment to professed ideals and institutions. Naturally, Moscow will try to exploit the disarray in the West and induce a lowering of its guard.<sup>134</sup>

Most analysts who study strategic surprise and related subjects have concluded that governments are caught unprepared primarily because of the ways people, both individually and collectively, think. Standard processes in perception and the formation of judgments are often responsible for cognitive defects when dealing with the unfamiliar. It is for this reason that a greater understanding of, as opposed to mere assumptions about, Soviet motivations and strategies is of such crucial importance.

One final topic which may help us to better understand Soviet motivations is that of risk-aversion and redundancy. Several studies have surveyed Soviet patterns of military and political intervention in cases which provided the country with either an opportunity to act in the interest of furthering its own foreign policy objectives or placed it in a position of being compelled to act. The conclusion which was reached in these comprehensive (but far from

---

\* See Appendix A(9)

conclusive studies) was that for various reasons the Soviet Union tends to be a basically risk-averse society, one which for the most part avoids risks which involve a great deal of uncertainty and in which a positive outcome cannot be guaranteed. The main reasons for this risk-averse stance appear to be as follows:

1) Soviet decision makers, believing in the ideological inevitability of the victory of Marxism-Leninism in the world, have tended to favor low over high risks;

2) Because of the considerable asymmetry between the strength and capabilities of the Soviet State and the underdeveloped and backward conditions existing in Soviet society, dysfunction has resulted. This dysfunction makes the Soviet system more static, protective, defensive, and cautious, and less dynamic-offensive and aggressive (unless conditions are so favorable as to warrant a higher degree of risk taking);

3) In a developmental socio-economic typology of political systems, the U.S.S.R. is classified on Level E: "a political system still inspired by a program of construction, but which is achieving leisure and affluence."<sup>135</sup> This stage tends to contain very low risk takers, thus placing the U.S.S.R. among the more cautious political systems in the world at its present stage of history; and, lastly

4) There is a hypothesis which states that, "the maximum risk a political system takes is a constant characteristic of that system. The intrinsic riskiness of the action, plus the preexisting threshold of tension will not exceed this constant." It is believed, as a consequence, that if the intrinsic riskiness of the two independent variables--situation and threshold of tension--exceeds the constant, the objective of the decision maker will be to bring the riskiness within the limit of tolerance of the constant.<sup>136,137</sup>

In regard to point four, this theory appears to be valid in view of our examination of Soviet practices, where the tendencies favor reducing risk to an acceptable level. In this sense, it appears that one of the chief aims of reflexive control theory is to lower risk and increase the predictability of situations in order to allow Soviet decision makers to take more affirmative and decisive actions. There is one seeming paradox which has arisen in recent years and requires closer examination. If it is true that Soviet decision makers are not gamblers, preferring a low level of investment and low odds, how does the active development of a massive and modern war-machine correlate with such a low risk-taking profile? This important question leads

us to a consideration of the subject of redundancy.

The natural corollary to the state of being risk-averse would seem to be a desire to bolster one's defenses and operate from a position of strength. One way to guarantee a position of strength is to maintain reserves and reinforcements to cover any eventuality which may arise. The Soviets accomplish this aim through a reliance on redundancy--the quality of exceeding what is considered by others to be necessary or normal. Rubinstein succinctly captures the essence of the Soviet viewpoint on military redundancy when he states:

First, massive military power is perceived as the best defense, not only against any NATO attack or attempt to intervene in Eastern Europe, but also against attempted national Communist defections or uprisings. Second, the Soviet leadership values redundancy. As the saying goes, "Russians feel more comfortable with three armies too many than three divisions too few." Overinsurance is axiomatic in Soviet military doctrine.<sup>138</sup>

Beaumont has brought to attention another aspect of redundancy which is not so commonly recognized but is of equal importance to the Soviet emphasis on "keeping all bases covered." That is, the practice of non-repeating techniques so that, in addition to being overwhelmed by sheer force and numbers, the adversary is also kept disoriented by the inability to establish patterns within the redundancy itself. This concept of gaining advantage through the use of variegated response appears to have been heavily influenced by two sources. First, W. Ross Ashby's "Law of Requisite Variety," which states that only variety in R (the Regulator) can force down the variety due to D (a set of disturbances), in other words, "only variety can destroy variety." (Ashby's theories on requisite variety and cybernetics have had a much greater and more lasting impact in the Soviet Union than they have in the West).<sup>139</sup> And secondly, by the Soviet study of the psychology of attention. This academic discipline



and, in particular, its research on the "orienting reflex" has convinced the Soviets of the value of inducing psychological strain and inability to cope through inhibition of the ability to establish patterns.<sup>140</sup> These repeating techniques, coupled with an emphasis on redundancy, would thus appear to be very effective tools in the attempt to reduce risk and create "right conditions" to gain advantage, and possibly even control, over an adversary. As Beaumont has noted, "The cross-links between Soviet psychology, the military and engineering are far more well developed than in the West and have been since the Revolution."<sup>141</sup> It is hoped that this discussion of the origins of reflexive control theory has helped to illuminate some of these cross-links and the more crucial elements contained within them which pertain to the theory's development.

#### 6) From Past to Present--The Evolution of the Theory

Thus far we have seen that the concept of control is and has been of paramount importance to the Russian people, and later to the Soviet state, for environmental, historical, and social reasons. It appears that under the general rubric of control, the concepts underlying reflexive control have been exercised informally but effectively throughout Soviet history. Prior to the early 1960s, however, the "theory" appears to have been applied intuitively or subconsciously and not as a formalized scientific method of ensuring greater control.

Reflexive control appears to have been an outgrowth of the historical and cultural soil of Russia; germinated by the emphasis on control; nourished by psychological aspects of the Russian mindset such as dependence on a leader, awareness of external others, the importance placed on cognition and reflection,

and a society characterized by vranyo and maskirovka; and kept flourishing by the social and political realities inherent in the Soviet system. Reflexive control was originally employed as a natural, subconscious extension of these varied influences in much the same way as a chess player would attempt to keep one step ahead of his opponent and gain advantage over him by not only observing his actions and interpreting likely moves, but also by sending out specific signals of intention in an attempt to predetermine the opponent's view of the situation and subsequently his reactions.

The meaning and some of the uses of reflexive control have been alluded to throughout the paper. It is hoped that at this juncture the reader has a basic feel for its concepts and operationalization--at least on a nonscientific basis. At this point, an attempt will be made to define reflexive control in a more technical exact sense, as it has been developed in the U.S.S.R., primarily in the military sphere. The formalization and scientific process leading up to its development will also be illustrated as we understand it. Several authoritative studies have already been written explaining in depth and detail the technical, mathematical aspects of the theory; most notably, the works of Dr. Vladimir A. Lefebvre: The Algebra of Conflict, and more recently, Reflexive Control: The Soviet Concept of Influencing an Adversary's Decision Making Process. No attempt will be made here to duplicate or improve upon the work of the experts; rather the reader will be presented with an overview of the major concepts and components of reflexive control as delineated by Lefebvre and others. The serious student of reflexive control theory per se is therefore directed to these most comprehensive and authoritative reports for more extensive knowledge and understanding.

The major thrust of this particular research effort is to uncover some

of the underlying factors which have influenced the development of reflexive control. This is an area of study which has been touched upon in most of the major studies, but has received less detailed attention than the military and technical applications of reflexive control. In keeping with this orientation therefore, the primary concern here will be to give form and clarity to the many concepts and ideas introduced thus far in the body of the text as well as to substantiate the direction of the psychocultural and historical trends previously discussed, and trace their connection to formal reflexive control theory.

#### B. Definition

One gains an advantage in conflict if one has an accurate image of the opponent's image of the situation and of how the opponent applies a particular "doctrine" in an attempt to solve the problem as "he" sees it; above all if one is able to influence the opponent's perception of the situation or his goals or his doctrine and at the same time conceal from him the fact that one "is" influencing him.<sup>142</sup>

The above quotation captures the essence of reflexive control--the first part expresses in simple form the purpose of reflexive control, the latter part the method. It is clear that to the Soviets effective decision making is seen to necessitate a focus on the adversary's cognitive map or operational code. This entails knowing how to reflect the object of control's internal world and knowing how to obtain an accurate reproduction of the basic components of his behavioral strategy. Reflexive control is thus an identification of the reasoner's intellect with that of his opponent and an emulation of this reasoning with the objective of ultimately disrupting and controlling the opponent's 'decision algorithm.' Reflexive interaction can be expressed by

the polynomial:  $\Omega = T + \Omega_x + \Omega_y$  (where T represents the situation).

The decision to execute reflexive control can be represented as:



It is felt by the Soviets that reflexive control can be successfully executed independent of the "quality" of the opponent's reasoning so long as this reasoning is imitated thoroughly and accurately enough.

Reflexive control is constructed of two parts: 1) reflection--a psychological concept, and 2) control--a purely cybernetic concept which will be discussed in greater detail in the next section. Reflexive control is used to influence the actions of the opponent, and is accomplished by understanding his cognitive map thoroughly enough to shape his perceptions of the situation without evoking his awareness that his thoughts are not his own. In this regard, attention to psychological aspects and subjective factors is of decisive importance. As Druzhinin and Kontorov have explained:

Control of the enemy assumes the influencing of the enemy's decisions by utilizing a profound knowledge of his politics, ideology, military doctrine, objectives, the state of his forces, organization, psychology, the personal qualities of his executive personnel, his mutual relations, and emotional state.<sup>143</sup>

The concept of strategy thus becomes important here because it refers to a plan for choosing individual moves which is complete in the sense that no event, whether the action of opposing players or a random occurrence allowed by the conflict structure, is not anticipated by the plan. Reflexive control is an especially useful strategic tool because its unobtrusive and often undetectable nature allows the optimization of decisions by helping decision makers identify and quantify the best alternative available strategies based on an accurate reflection of the opponent's frame of reference. The

flexibility and creativity allowed by the theory provides means of eliminating patterns and vulnerabilities and establishing randomness of actions. As Lefebvre has stressed, "In contrast to a scholarly debate, the most inventive liar wins in conflict."<sup>144</sup> Thus, a reflexive schematization of conflict results in immediate advantages: 1) the logical ins and outs of decision making become clearer, and 2) more favorable conditions are created for independent research on the social-ethical and psychological shell of conflict. This brings us to a very important aspect of reflexive control which Lefebvre refers to as the "rank of reflection."

As the Soviets see it, different societies and different individuals within those societies operate on different levels of awareness of the existence of reflection (or multiple-tier awareness). Awareness of the existence of reflection in social interaction and of its importance will obviously result in a higher rank of reflection, and, in the Soviet view, the advantage in a conflict situation lies on the side having the highest rank of reflection. When questioned, Dr. Lefebvre replied that he believed at the present time the United States (society as a whole) has a rank of reflection of zero (0)--that is, Americans tend to pay attention and give validity only to the real situation as they perceive it, excluding the importance of the situation from the opponent's perspective; whereas the Soviet Union (society as a whole) has a rank of reflection of one (1), which is being raised rapidly as a result of conscious educational efforts. He perceives this reality as leaving the U.S. in a position of vulnerability vis-a-vis the Soviet Union, which explains why he is anxious to raise the American level of awareness of reflexive control in its many facets.<sup>145</sup> Lefebvre's view in this regard correlates well with Beaumont's assertion that Americans think in a linear fashion and are at a

distinct disadvantage when called upon to compete with an opponent well-versed in subtle or devious techniques. Reflexive control is thus misinformation or information dissemination which attempts to control a given situation in the broad context of psychological warfare--a type of warfare at which Americans have proved themselves traditionally weak.

In addition to the advantages already mentioned which can be derived from reflexive control, the Soviets discovered another of major importance during their experiments with the theory. It was demonstrated that reflexive control may be conducted effectively without a chain of feedback, which, prior to this realization, was believed to be a necessary part of any type of control. Feedback is useful in terms of measuring the effectiveness of the control and correcting mistakes, but in cases where it would be difficult to organize or prohibitively expensive, it can be omitted without adverse results. Hence, rank of reflection and the ability to operate without feedback appear to be concepts with the potential for serious consequences if not examined more rigorously by American military and political analysts.

In addition to being made up of two components--the psychological and the cybernetic--reflexive control theory has other dual aspects. For one, it can be conducted in two ways: 1) reflexive control through transformation of the enemy's information processing (cognitive), and 2) reflexive control by selecting the messages (informational). Furthermore, reflexive control can be of two types: 1) constructive reflexive control in which the enemy is influenced to voluntarily make a decision favorable to the controlling side, or 2) destructive reflexive control in which means are employed to destroy, paralyze, or neutralize the procedures and algorithms of the enemy's decision making processes.<sup>146</sup> These varied aspects and applications of the

theory add to its range and potential effectiveness, as well as to the difficulty of discerning it in use.

Reflexive control can be conducted in many different ways, each of which are described in detail in Lefebvre's book on Reflexive Control. Here, an outline of these uses will be presented to give the reader an idea of the scope of its application. Reflexive control may be conducted by means of:

1. transferring false information about the real situation

$$\pi_{yx} \rightarrow \pi_y$$

2. creating a goal for the opponent

$$\mu_{yx} \rightarrow \mu_y$$

3. creating the doctrine for the opponent

$$\Delta_{yx} \rightarrow \Delta_y$$

4. transferring a decision

$$p_{yx} \rightarrow p_y$$

5. transferring an image of the stage

$$\mu_{yx} \rightarrow \pi_{yx} \rightarrow \pi_y \rightarrow \mu_y$$

6. the transformation  $\pi_{yxy} \rightarrow \pi_{yx}$

7. the transformation  $\mu_{yxy} \rightarrow \mu_{yx}$

8. the transformation  $\Delta_{yxy} \rightarrow \Delta_{yx}$

9. the chain  $\mu_{yxy} \rightarrow \pi_{yxy} \rightarrow \pi_{yx} \rightarrow \mu_{yx}$

10. neutralization of an opponent's deductions

When the rank of reflection (reflexive control ability/skill) is raised, these more complicated transformation chains can be used.

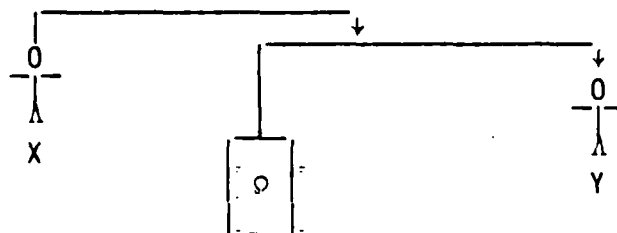
Again, the serious student is directed to Lefebvre's works for more substantial and detailed explanations. Druzhinin and Kontorov have indicated that the main types of reflexive control over an opponent are camouflage, disinformation, demonstration--a special way to convey information about one's readiness to begin an action, and stimulation--which is synonymous with conveying information to cause an adversary to act in a predetermined manner. The enemy's perceptions of the situation and his goals appear to be most

susceptible to the influence of reflexive control. In combat, the situation may include such aspects as physical environment, size and characteristics of forces, technological development, and current evolution of events. Goals may include timely accomplishment of operations, preservation of force capabilities, and control of geographic locations; all of which may be influenced by such approaches as a show of force, presentation of uncertainties, or a threat which prompts inappropriate countermeasures. Reflexive control of other aspects of the opponent's decision algorithm may be more difficult to exercise, but with proper understanding and simulation of the adversary's perspective may also be effectively accomplished.

One essential aspect of effective reflexive control involves avoidance of an underestimation of the enemy's abilities and of his rank of reflection, both of which can seriously undermine the potential for exercising control. It is also important to apply non-repeating techniques to prevent the opponent from deducing what means and methods are being applied and thus allowing him the opportunity to develop appropriate countermeasures.

To summarize, let us rely on the words of the experts:

Control of an opponent's decision, which in the end is a forcing of a certain behavioral strategy on him through reflexive interaction, is not achieved directly, not by blatant force, but by means of providing him with the grounds by which he is able to logically derive his own decision, but one that is predetermined by the other side. The transfer of grounds is a switching of X into the process of reflection of the situation by Y; it is by this that X begins to control the decision making process.





The process of transferring grounds for making decisions from one opponent to the other we call reflexive control. Any deceitful movements (provocation, intrigues, disguises, deceit in general) are achievements of reflexive control.<sup>147</sup>

It is hoped that this brief and sketchy overview has helped the reader to better understand the theory, and to draw some connections between its technical aspects and the psychological underpinnings from which they developed. These include the importance of control; the desire to be prepared for any eventuality (risk-aversion); hypervigilance and awareness of others (reflection and multiple-tier awareness); the importance of understanding the adversary; and purposeful, scientific influence on the environment in order to bring about 'right conditions.' We will now go on to examine how the application of cybernetic principles, overlaid on the psychocultural framework provided by the Russo-Soviet mindset, appears to have stimulated the formalization of reflexive control theory in the U.S.S.R.

### C. Formalization and Development of the Theory

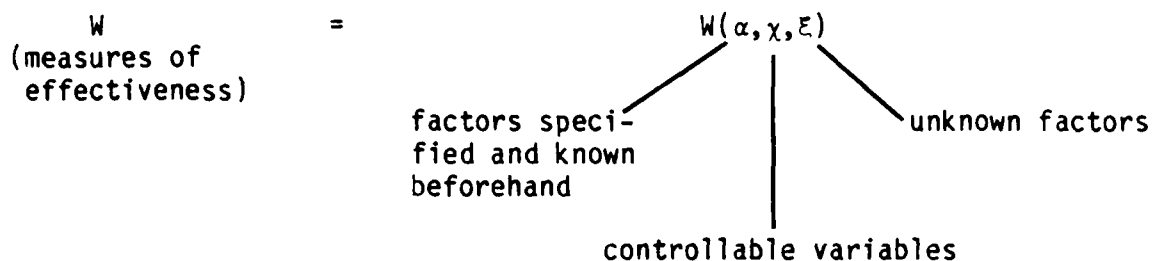
During the 1950s there was an upsurge of interest in the subjects of Computer Science and scientific decision making in the Soviet Union. Prior to this time, it was believed that decision making was an art based on experience and intuition, as well as ideological conviction and loyalty to the Party. However, based on the experiences of World War II and increasing realization of the high cost of decision errors, there was a gradual realization of the need for a quantitative approach to decision making and for an increase in automation in technology and industry.<sup>148</sup> At this same time in the Western world, activities in the development of Cybernetics--the science of control of complex, dynamic systems--were attracting attention, in particular

the work of such men as Norbert Wiener and W. Ross Ashby. At first, cybernetics was rejected in the U.S.S.R. as a reactionary pseudoscience, contrary to Marxist doctrine. However, by 1956 the necessity to improve technology and decrease decision errors resulted in the acceptance of cybernetics and the establishment of the Cybernetics Institute.

It is interesting to note that, in spite of this inauspicious beginning, cybernetics theory has come to be embraced much more enthusiastically by the Soviets than by decision makers in the West, where it appears to have gone into decline. In particular, the work of Ashby, which is not widely respected in the West, has become the cornerstone of cybernetic development in the U.S.S.R. One cannot help but speculate whether Ashby's statement-"...the theories of games and cybernetics are simply the foundations of the theory of How to Get Your Own Way. Few theories can be richer in applications than that!"<sup>149</sup>--did not play a significant role in awakening Soviet interest in the field of cybernetics. After all, is this theory not at the heart of the Soviet emphasis on control and the Soviet mindset in general?

In any case, cybernetics and the related academic discipline of operations research developed simultaneously from these considerations, and it is clear that both have impinged upon and influenced the other under the Soviet injunction that "control must be developed scientifically." Operations research is defined by the Soviets as, "the application of quantitative, mathematical methods to prepare decisions bound to be made in all the fields of objective bound human activity. It begins whenever one or another mathematical technique is applied to substantiate the decisions being taken."<sup>150</sup> Important considerations to the Soviets when attempting to optimize a decision are: what is the nature of unknown factors ( $\xi$ ), what is their origin, and who

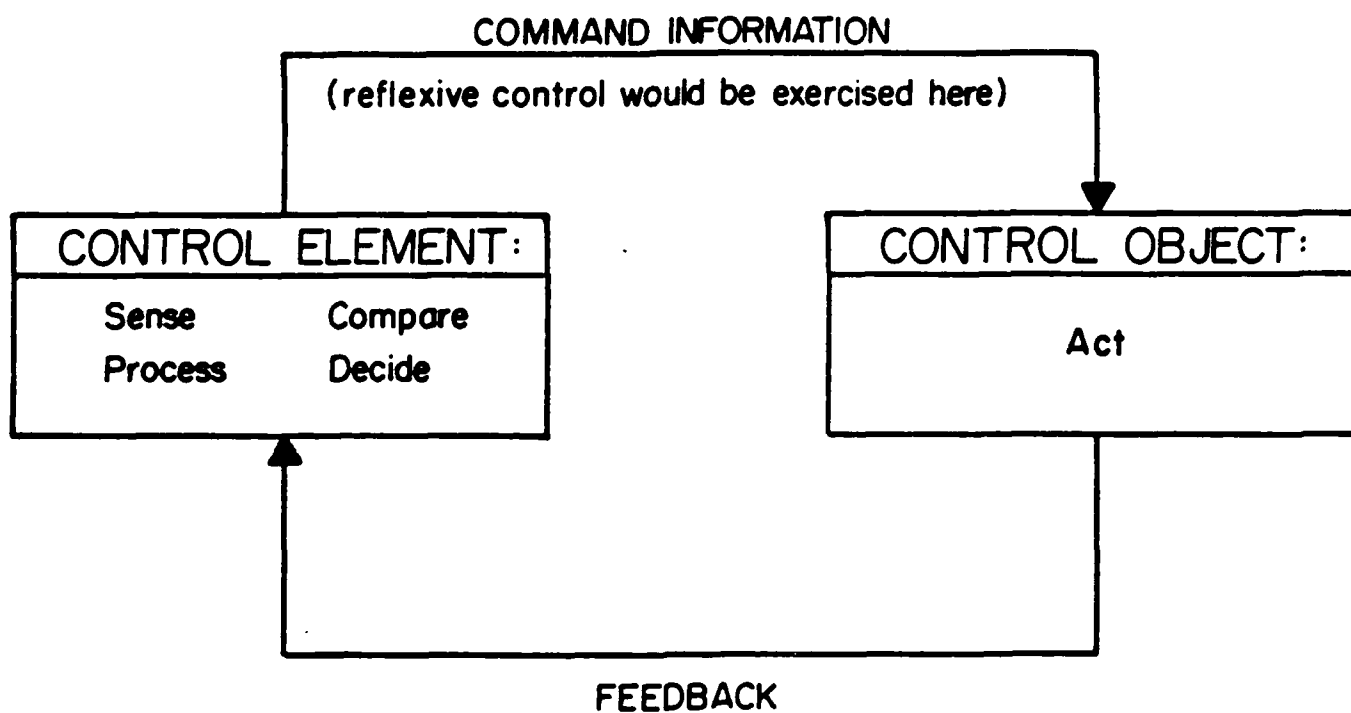
controls them. Measures of effectiveness (MOEs) in Soviet operations research take these unknown factors into account in their algorithms, and attempt to optimize effectiveness in spite of them:



It appears that interest in the theory of reflexive control -- which seeks to make uncertain situations more certain, and to increase predictability and therefore control of the situation--may have been an outgrowth of this major concern of operations research; as well as of the Soviet acceptance of cybernetics, and their interest in the study of control processes and flow of information in systems. In addition, reflexive control appears to be an attempt to decrease some of the shortcomings inherent in the rigid structure of game theory as a problem solving device; and at the same time to enhance the effectiveness of decision making using a combination of game and reflexive control theory, or reflexive control theory on its own (see Figure 15 and Figure 16). It is at this point that the work of Vladimir Lefebvre became instrumental in the development of reflexive control theory.

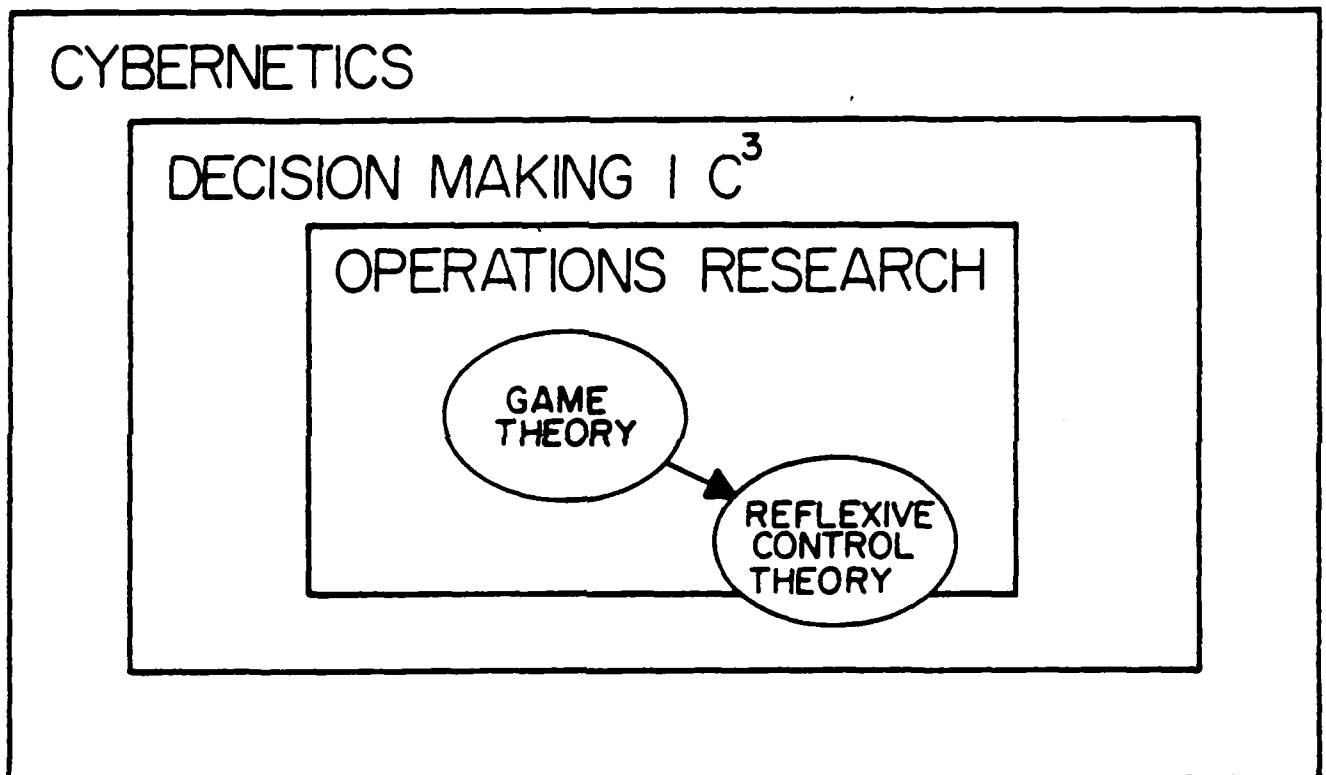
Cybernetics was initially developed by the Soviets at the First Computer Center of the Ministry of Defense. One of the major tasks of the institute during the early 1960s was to develop methods of optimization of the decision making process. Lefebvre worked in a sub-unit of the institute developing algorithms for the automation of computers, under the leadership of Colonel

Figure 15 : CLOSED CYBERNETIC CONTROL LOOP.



\*from Lifshits, 1984

Figure 16 : RELATIONSHIP OF CYBERNETICS TO REFLEXIVE CONTROL THEORY.  
( Developed within Operations Research but partially subsumed under the  
larger umbrella of Decision Making I C<sup>3</sup> )



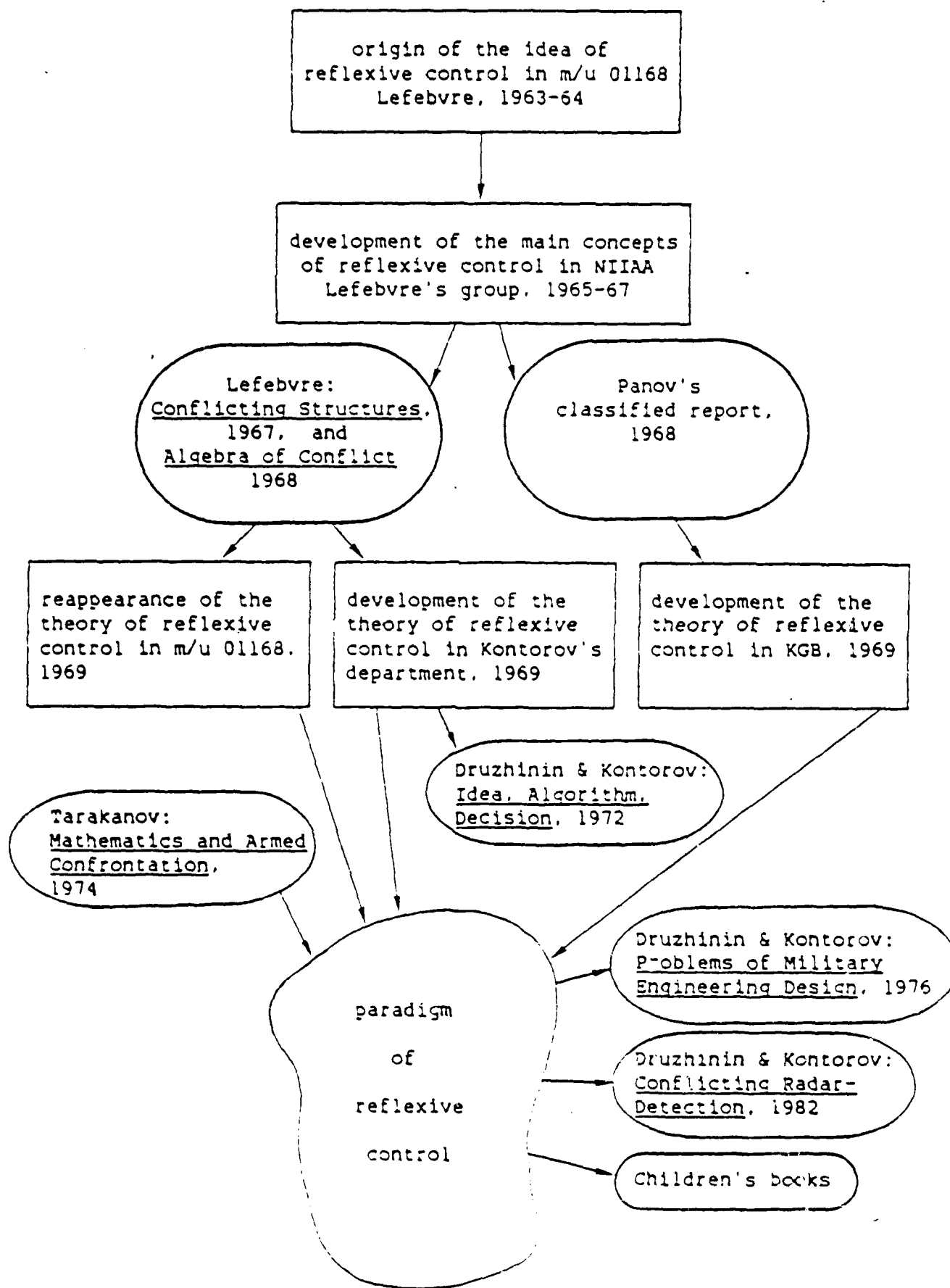
Tkachenko. In 1963, Lefebvre proposed a different approach to the problem from the game theory methods being employed by the other scientists involved. He proposed that there was a need to organize a special 'modeling system' consisting of three subsystems: 1) a unit to simulate one's own decisions, 2) a unit to simulate the adversary's decisions, and 3) a decision making unit. In response to criticisms that the principle of guaranteed results must be followed and that decisions must be independent of the decisions of the adversary, he suggested the concept of reflexive control.

He argued that in making his decision, the adversary uses information about the arena of conflict, about his troops and the opposing force's, and about combat ability. Lefebvre set forth the concept of influencing the enemy's channels of information and actually shifting the flow of information in a way favorable to the decision maker by influencing the adversary to make a false 'optimal' decision--optimal in fact to the opposing side. Thus, reflexive control formalized a model of looking at conflict situations which included both objective and subjective factors. In 1964, Lefebvre proposed a positional indexation for the elements involved in decision making. Elements such as goal, doctrine, map, and decision were assigned indices which allowed researchers to describe an iterative process of decision making in condensed form. Using symbols to represent these elements, algebraic representation or algorithms can be used to model the process of decision making, eliminating the difficulties and obscurities of graphics and natural language. Lefebvre's ideas were followed by experiments which proved their efficacy and creativity, and the newly labeled theory of reflexive control quickly began to attract interest and advocates, especially in the military realm where its advantages and potential applications became readily apparent.<sup>151</sup>

In 1968, a KGB agent named Panov published a classified report of Lefebvre's work, and it is rumored that the KGB organized its own laboratory of reflexive studies. According to Lefebvre himself, the theory of reflexive control became a classified subject shortly following the publication of Panov's report, which lends support to the viewpoint that it is considered an extremely valuable concept by the Soviet leadership. Military interest heightened with the publication of K. V. Tarakanov's book, Mathematics and Armed Conflict in 1974, and particularly with Druzhinin and Kontorov's Problems of Military Systems Engineering in 1976. These highly ranked officers of the Soviet Army's General Headquarters claim that it is widely used in pedagogical, political, diplomatic and administrative activities. In military affairs, they discuss the excellent results reflexive control engenders in the training and control of troops and the development of effective leadership, in addition to the obvious goal of control of the adversary.<sup>152</sup> (See Figure 17 for a graphical depiction of the development of reflexive control theory in the U.S.S.R.).

Reflexive control is treated as a well known topic among Soviet officers and is referred to quite often in officer directed publications and handbooks; whereas in American military publications and in Western literature in general it is a topic which seldom confronts the researcher, and when it does, commonly only in reference to reflexive control as a relatively minor component of Soviet decision making. It appears that it is past time for American analysts to realize that reflexive control is in fact an integral, valuable, and potentially very lethal part of the Soviet decision making process (especially since the advent of cybernetics as an important science) and as such is worthy of much greater attention and research--a viewpoint which the formalized theory's originator himself, Dr. Lefebvre, has expressed very strongly.

FIGURE 17. THE CHRONOLOGICAL DEVELOPMENT OF FORMALIZED REFLEXIVE CONTROL THEORY\*



\* From Lefebvre, V. A., Reflexive Control... (op. cit.), page 30.



#### IV. Conclusion

##### A. Summary of Key Points

In this paper an attempt has been made to trace the development of the theory of reflexive control in the Soviet Union, with particular emphasis on the possible psychocultural and historical factors which have contributed to its development.

The first section was devoted to an overview of the present state of Soviet-American relations, especially to the existence of vast differences in world view and terms of reference between the two countries. These differences have contributed to the development of misperceptions and often erroneous strategic assumptions within the American perspective on the Soviet Union, and Sovietologists have long stressed the necessity of viewing events from the Soviet perspective, and avoidance of the assumption of external symmetry. Attention was also drawn to some of the crucial topics pertaining to the formation of decision making processes which differentiate the two countries. These include different emphases on control and strategy issues, and the direct, linear decision patterns of Americans as opposed to a systems approach characterized by subtle and devious practices which typifies Soviet decision making. The Soviet emphasis on the importance of cognition and reflection was also highlighted.

The next section concentrated on an examination of some of the factors in the Russo-Soviet historical experience and traditional psychocultural patterns which have contributed to the development of a distinctively Soviet mindset and world view. These, in turn, have influenced the process of decision making. Two hypotheses were presented in this discussion: the first being that components of reflexive control have been utilized throughout Soviet

history; and the second being that reflexive control represents an integral aspect of Soviet decision making, and as such reflects the Russo-Soviet emphasis on control and creation of 'right,' predictable conditions.

Due to the impossibility of scientifically validating these hypotheses, it cannot be said that they have been proved as presented here. However, it is felt that there is strong evidence to support the belief that such trends and practices in Soviet decision making do indeed exist and have had solid grounding in historical and psychocultural predispositions, several of which were discussed at length. It cannot be denied that the Soviet historical experience has been not only unique in its own right but also diametrically different from the American one; especially in regard to harshness of conditions and predominantly authoritarian, often ruthless government over the centuries. These factors appear to have engendered a distinctively Soviet outlook on life and methodology of dealing with the world which has, over time, exhibited tendencies toward hypervigilance, multiple-tier awareness, risk-aversion, ambiguity and deviousness in relationships and behavior, and a deep felt need for control, often of a reflexive nature.

Marxism-Leninism, in spite of its professed aim to create the "new Soviet man," has in many respects merely incorporated--although perhaps improving upon--some very traditionally Russian behavioral traits and ways of interfacing with society and the world. It is interesting to note that Vladimir Lefebvre, in a student seminar on reflexive control at the Naval Postgraduate School, felt it was important to point out that, in the Soviet Union, guessing games utilizing the basic principles of reflexive control theory are as common and popular among elementary school children as jump rope is among American students. This fact appears to support the thesis

that reflection and control (sometimes combined together as reflexive control) are pervasive and integral aspects of the Soviet experience. The consistently superior performance of Soviet players in international chess championships, as well as the enormity and effectiveness of the Soviet propaganda network are two other factors which seem to lend credence to the validity of this viewpoint. Further and more scientific research is of course required for substantiation and validation of these apparent trends.

In the next major section an attempt was made to show how the theory of reflexive control became transformed from a subconscious, informal model of decision making into a formalized, scientific and mathematically grounded science. The hypothesis presented here was that the science of cybernetics played a major contributing role in this regard. This hypothesis is much easier to substantiate, if not to actually prove, simply because the Soviets have been so open in expressing their interest and belief in cybernetics; and due to their extensive research into its varied applications. Not only is the closed cybernetic control loop (without the necessity of feedback) at the heart of reflexive control theory; but also the major developer of the theory, Dr. Lefebvre, was conducting research directly related to cybernetics and scientific decision making at the time of his presentation of reflexive control. There is evidence to show that certain concepts of W. Ross Ashby's, such as requisite variety, amplification, and "the theory of how to get your own way" were instrumental in stimulating the development of nebulous concepts into a "scientific" theory of decision making as well. The fact that research on reflexive control is now a classified endeavor in the Soviet Union also appears to support the hypothesis that it is a theory of far greater importance and value than currently realized.

Thus, it appears, although it cannot be scientifically proven at this point in the research, that the Soviet Union has provided fertile soil--historically, psychoculturally, and scientifically--for the growth of a highly complex and potentially powerful method of decision making, influence, and control which can be termed reflexive control theory. Let us now examine the importance of the reality of reflexive control to the Western world.

#### B. Implications for the Future

There are undoubtedly many who would argue that even if reflexive control does in fact exist and is in fact being practiced it is not a factor of much consequence in the broad spectrum of military and political affairs. After all, historian Hannah Arendt,<sup>153</sup> economist John Kenneth Galbraith,<sup>154</sup> and sociologists Raven and Kruglanski<sup>155</sup> have conclusively demonstrated that methods of gaining influence and power have existed in every society and have been utilized in conflict situations since the beginning of history. These methods of influence, from informational to referential to coercive, have been exhaustively studied and documented, and their strengths and shortcomings illustrated. American society is certainly not devoid of attempts to influence and control public opinion. Many would point to the great coercive and "mind control" potential of the mass media and commercial advertising as an American example of reflexive control. However, there are important differences which must be kept in mind when trying to equate Soviet reflexive control with other forms of influence. These include the scope, purpose, and intensity of the practices. Attempting to gain influence is qualitatively different from attempting to gain total control. Practices which aim to gain domination on the military and political front cannot be considered as

innocuous and harmless as practices designed to sell a particular brand of soap or toothpaste, and this important distinction should not be overlooked. In addition, it appears that reflexive control has the flexibility and ability to incorporate (thereby decreasing the shortcomings inherent in) other forms of influence such as informational and referential and thus should be considered a potentially much stronger and more foolproof method of exercising control than the majority of older and more widely understood methods.

Others will undoubtedly argue that reflexive control can never really be developed into a scientific method due to the impossibility of reducing thought processes and psychological functioning to quantitative, exact objects of control, and is therefore ineffectual. This may be true, but, one distinct advantage of thinking in terms of reflexive control--whether or not it can ever be developed into a perfect science of control--is that it forces the potential user to develop a mindset in which understanding the enemy, thinking through moves and countermoves, and attempting to develop a rigorous methodological approach to analyzing strategic problems and making optimal decisions is of utmost importance. This emphasis on formulating goals to work toward, and gaining advantage through thorough knowledge of the thought processes and orientation of the opponent has been strikingly absent from U.S. historical experience--both military and diplomatic--and has, in many instances, given the Soviets a distinct advantage. The orientation toward reflexive control may be as potentially dangerous as the execution of the theory itself.

One final important consideration must be addressed. It is widely acknowledged that, in addition to research into reflexive control, the Soviet Union is supporting other psychic research at a much higher and more official

level than is true of the United States. Since the nineteenth century the Soviets have been interested in developing a means for hypnotic control of behavior at a distance. This interest has been extended in recent years by potentially aggressive psychic experimentation having as its main goal the modification of the behavior and feelings of remote humans by psychic means. Much official research in the U.S.S.R. appears to be directed toward developing psychic abilities as a means of control and manipulation, therefore Targ and Harary have pointed out:

Reliable, publicly available information about psi research can help protect us all from the damaging effects of misinformation. Learning to discriminate our own psychic impressions from externally induced suggestions by others may also ultimately protect us from the possibility of psychic manipulation.<sup>156</sup>

Here, we are talking about a refinement and application of reflexive control at a highly developed level. If American analysts continue to discount or minimize the potential importance of this theory and its applications, a position of extreme vulnerability may be the result.

The critics and the skeptics may, of course, be right after all. There may be very little threat to the Western world from the apparent Soviet orientation toward the use and development of reflexive control theory and other related methodologies. Perhaps there is no threat at all. Men like Mikhail Gorbachev and Soviet correspondent Vladimir Pozner, with their sophistication, skilled rhetoric, and urbane Western manner, have done much to reassure many Westerners that there has been a significant and deep rooted change in Soviet attitudes and goals, and that the Soviets truly are becoming "just like us." Even Western statesmen as astute and discerning as Great Britain's Margaret Thatcher have been impressed with Gorbachev's charm, and

have expressed the optimistic belief that finally there is a Soviet leader in the Kremlin with whom the Western powers can negotiate without need for obsessive suspicion and an overly defensive posture. It is important to keep in mind, however, that the appearance of non-threat and non-influence is an important component, in fact probably the principle element, of reflexive control theory. For this reason, the present (or future) appearance of non-threat in superpower relations should not become cause for complacency. As Knorr and Morgan have emphasized in their research into strategic surprise:

...to be alert in threat perception is prudent even when conflict situations do not look alarmingly dangerous.<sup>157</sup>

# FOOTNOTES

- 1 Beaumont, Roger A., "The Soviet Command Structure: The Three Headed Serpent," Signal, Journal of the Armed Forces Communications and Electronics Association, Burke, Virginia, Volume 39, Number 4, December 1984, p 40.
- 2 Moose, Paul H., "A Systems View of Deception," in Daniel, D. C. and Herbig, K. L. (Eds.), Strategic Military Deception, Pergamon Press, New York, 1982, p. 147.
- 3 Burhans, William A., "Opposing Views: Radar Wars," Journal of Electronic Defense, Volume 6, Number 10 (USPS 438-690), October 1983, pp. 35-36.
- 4 Lefebvre, Vladimir A., Reflexive Control: The Soviet Concept of Influencing on Adversary's Decision Making Process, Science Applications, Inc. (SAI-84-024-FSRC-E), Englewood, Colorado. February 1984, p. 4.
- 5 Hough, Jerry F., Soviet Leadership in Transition, The Brookings Institution, Washington, D. C., 1980, pp. 4-5.
- 6 Powell, William S. and Taylor, James G., The Soviet Perspective on the Nature and Evaluation of Command and Control, Alphatech, Inc., Burlington, Massachusetts, October 1983, p. 3.
- 7 \_\_\_\_\_, "World: Echoes Across the Gap," Time, 3 September 1984, p. 48.
- 8 Taksar, Michael, "Notes to the Stanford Community Regarding Soviet Scientists," informal report, Stanford University, 1984, p. 32.
- 9 London, Kurt (Ed.), The Soviet Union in World Politics, Westview Press, Boulder, Colorado, 1980, p. ix.
- 10 Penkovskiy, O., The Penskovskiy Papers, Doubleday, New York, 1965, chap. 3.
- 11 Crozier, Brian (Ed.), The Peacetime Strategy of the Soviet Union, Report of a Study Group of the Institute for the Study of Conflict, London, February/March 1973, p. 18.
- 12 Lefebvre, Vladimir A., op. cit., pp. 125-126.
- 13 Shubik, Martin, in an Honorary on "Gaming and Game Theory" presented at the Naval Postgraduate School, July 1984.
- 14 Bathurst, Robert, "On Creating an Enemy," Naval War College Review 34, Number 6, 1981, p. 13.
- 15 Ibid., p. 14.
- 16 Editorial, "The Pressing Tasks of Ideological Work," Pravda, Moscow, 8 July 1972.
- 17 Mitchell, R. Judson, Ideology of a Superpower: Contemporary Soviet Doctrine on International Relations, Hoover Press Publications, Stanford University, California, 1982, p. 131.



- 18 Powell, W. S. and Taylor, J. G., op. cit., p. 13.
- 19 Ibid., p. 26.
- 20 Boguslavsky, B. M., et. al., ABC of Dialectical and Historical Materialism, Progress Publishers, Moscow, 1975.
- 21 Feuer, Lewis S., "Dialectical Materialism and Soviet Science," in Marsak, Leonard M. (Ed.), The Rise of Science in Relation to Society, The MacMillan Company, New York, 1964, p. 109.
- 22 Homans, George C., The Nature of Social Science, Harcourt, Brace and World, Inc., New York, 1967, p. 46.
- 23 Feuer, L. S., op. cit., pp. 119-120.
- 24 Ibid., p. 109.
- 25 Schapiro, Leonard, "Totalitarianism in Foreign Policy," in London, Kurt (Ed.), op. cit., p. 19.
- 26 Hall, Edward T., Beyond Culture, Anchor Books, Anchor Press/Doubleday, Garden City, New York, 1976, pp. 105-116.
- 27 Byely, B. (Col. ret.), et. al., Marxism-Leninism: On War and Army, Progress Publishers, Moscow, 1972.
- 28 Crozier, Brian (Ed.), op. cit., p. 31.
- 29 Clews, John G., Communist Propaganda Techniques, Frederick A. Praeger, Publishers, New York, 1964, p. 78.
- 30 Bouscaren, Anthony T., Imperial Communism, Public Affairs Press, Washington, D. C., 1953, p. 32.
- 31 Ibid., p. 6.
- 32 Gibert, Stephen P., Soviet Images of America, Crane, Russak, and Company, Inc., New York, 1977, p. 17.
- 33 Lenin, V., "What is to be Done?," in Clews, J. S., op. cit., p. 214.
- 34 Collins, John M., Grand Strategy: Principles and Practices, Naval Institute Press, Annapolis, Maryland, 1973, p. 116.
- 35 Gibert, Stephen P., op. cit., p. 45.
- 36 Brezhnev, Leonid, comments at a dinner in Moscow honoring Fidel Castro, 27 June 1972, in Crozier, B. (Ed.), op. cit., p. 1.
- 37 Labin, Suzanne, The Technique of Soviet Propaganda, United States Government Printing Office, Washington, D. C., 1960, p. 3.

- 38 Collins, John M., op. cit., p. 288.
- 39 Crozier, B. (Ed.), op. cit., p. 10.
- 40 Taksar, M., op. cit., p. 24.
- 41 Ibid., p. 23.
- 42 Dallin, Alexander, "The United States in the Soviet Perspective," in Bertram Christoph, Prospects of Soviet Power in the 1980's, The MacMillan Press, Ltd., London, 1980, p. 33.
- 43 Clews, John C., op. cit., p. 12.
- 44 Fehrenbach, T. R., op. cit., p. 637.
- 45 Lefebvre, Vladimir A., The Algebra of Conscience: A Comparative Analysis of Western and Soviet Ethical Systems, D. Reidel Publishing Company, Dordrecht, Holland, 1982, p. xiii.
- 46 Ibid., p. xiii.
- 47 Ibid., pp. 87-88.
- 48 Stalin, Josef, in Fehrenbach, T. R., op. cit., p. 532.
- 49 Ozeroy, Vladimir M., in a lecture on "Operations Research in the U.S.S.R.," Naval Postgraduate School, Monterey, California, 19 September 1984.
- 50 Bouscaren, A. T., op. cit., p. v.
- 51 Solzhenitsyn, Aleksandr I., in Aftenposten, Oslo, Norway, 11 September 1973.
- 52 Powell, W. S., and Taylor, J. G., op. cit., p. 11.
- 53 Ibid., p. 47.
- 54 Ibid., p. 31.
- 55 Ibid., p. 51.
- 56 Buslenko, N. P., Modelirovaniye slozhnykh sistem (Modeling of Complex Systems), Nauka, Moscow, 1968.
- 57 Powell, W. S., and Taylor, J. G., op. cit..
- 58 Collins, John M., op. cit., p. 87.
- 59 Ibid., p. 110.

- 60 Ulam, Adam B., Dangerous Relations: The Soviet Union in World Politics, 1970-1982, Oxford University Press, New York, 1983, p. 228.
- 61 Ibid., p. 233.
- 62 Hemsley, J., Soviet Troop Control, Brassey's Publishers Limited, Oxford, 1982, p. 9.
- 63 Ulam, op. cit., p. 64.
- 64 Fehrenbach, op. cit., p. 64.
- 65 Sarbin, Theodore R., "Prolegomenon to a Theory of Counter-Deception," in Daniel, D. C. and Herbig, K. L., Strategic Military Deception, Pergamon Press, New York, 1982, p. 151.
- 66 Greider, William, "U.S.-Sponsored Terrorism," Rolling Stone, Vol. 13, 6 December 1984, pp. 16-21.
- 67 Revel, Jean-Francois, The Totalitarian Temptation, Doubleday and Company, Inc., Garden City, New York, 1977, p. 23 (translated by David Hapgood).
- 68 \_\_\_\_\_, Whence the Threat to Peace, 3rd Edition, Military Publishing House (Voenizdat), Moscow, 1984.
- 69 Gvozdev, Y. and Alexandrov, Y., Grenada: U.S. Terrorism in Action: Documents, Facts, Comments, Novosti Press Agency Publishing House, Moscow, 1983.
- 70 \_\_\_\_\_, International Terrorism and the CIA: Documents, Eyewitness Reports, Facts, Progress Publishers, Moscow, 1983 (translated by Dmitry Belyavsky).
- 71 Kashlev, Yuri, Information Imperialism, Novosti Press Agency Publishing House, Moscow, 1984.
- 72 Beaumont, Roger, "The Soviet Command Structure: The Three Headed Serpent," Signal, Journal of the Armed Forces Communications and Electronics Association, Burke, Virginia, Volume 39, Number 4, December 1984, p. 40.
- 73 Ashby, Eric, Scientist in Russia, Penguin Books, Middlesex, England, 1947, pp. 117-118.
- 74 Vakar, Nicholas, The Taproot of Soviet Society, Harper and Brothers, Publishers, New York, 1961, p. ix.
- 75 Mehnert, Klaus, Soviet Man and His World, Frederick A. Praeger, Publishers, New York, 1962, p. 54.
- 76 Berdiaev, Nikolai A., The Origin of Russian Communism, London, 1937, p. 38.

- 77 Vakar, Nicholas, op. cit., p. 13.
- 78 Hough, Jerry F., Soviet Leadership in Transition, The Brookings Institution, Washington, D. C., 1980, p. 7.
- 79 Raven, B. H. and Kruglanski, A. W., "Conflict and Power," in Swingle, J., The Structure of Conflict, Academic Press, Inc., New York, 1970, p. 80.
- 80 Cullen, Robert B., "Dispatches: A Journey in the Slow Lane," Newsweek, November 19, 1984, p. 26.
- 81 Kubalkova, V., And Cruickshank, A. A., Marxism-Leninism and Theory of International Relations, Routledge and Kegan Paul, London, 1980, pp. 38-39.
- 82 Lenin, V. I., in Druzhinin, V. V., and Kontorov, D. S., Concept, Algorithm, Decision (A Soviet View), Soviet Military Thought, Vol. 6, (translated and published under the auspices of the U. S. Air Force), 1972, p. 257.
- 83 Hall, E. T., op. cit., p. 12.
- 84 Druzhinin, V. V., and Kontorov, D. S., Problems of Military Systems Engineering (Voprosy voyennoy sistemotekhniki), Voenizdat, Moscow, 1976, p. 309.
- 85 Fromm, Erich, Escape from Freedom, Holt, Rinehart, and Winston, New York, 1941.
- 86 \_\_\_\_\_, "International: Svetlana's Sad Odyssey," Newsweek, November 19, 1984, p. 69.
- 87 Mehnert, Klaus, op. cit., p. 197.
- 88 Gibert, Stephen P., op. cit., p. 28.
- 89 Cullen, Robert B., op. cit., pp. 22, 26.
- 90 Whence the Threat to Peace, (op. cit.), p. 68.
- 91 Ibid., p. 4.
- 92 Reshetar, John S., The Soviet Polity, p. 54.
- 93 Hingley, Ronald, The Russian Mind, Charles Scribner's Sons, New York, 1977, p. 36.
- 94 \_\_\_\_\_, Webster's New Collegiate Dictionary, G&C Merriam Company, Springfield, Massachusetts, 1976, p. 920.
- 95 Reshetar, John, op. cit., p. 53.
- 96 Ibid.

- 97 Mehnert, op. cit., p. 35.
- 98 Adomeit, Hannes, Soviet Risk-Taking and Crisis Behavior, George Allen and Unwin, London, 1982.
- 99 Eaton, Merrill T., et. al., Psychiatry, 3rd Edition, Medical Examination Publishing Company, Inc., New York, 1976, pp. 12-15.
- 100 Brehm, Jack W., and Cohen, Arthur R., Explorations in Cognitive Dissonance, John Wiley and Sons, Inc., New York, 1962, pp. 160-162.
- 101 Ibid., p. 170.
- 102 Lefebvre, V. A., Algebra of Conscience (op. cit.), pp. 61-65, 84.
- 103 Raven, Bertram H., and Kruglanski, Arie W., "Conflict and Power," in Swingle, Paul, The Structure of Conflict, Academic Press, Inc., New York, 1970, p. 79.
- 104 Reshetar, op. cit., p. 53.
- 105 Goldman, Marshall I., U.S.S.R. in Crisis: The Failure of an Economic System, W. W. Norton and Company, New York, 1983, p. 115.
- 106 Brehm, J. W., and Cohen, A. R., op. cit., p. 163.
- 107 Lefebvre, V. A., Algebra of Conscience (op. cit.), p. 76.
- 108 Reshetar, J., op. cit., pp. 52-53.
- 109 Hingley, op. cit., p. 24.
- 110 Beaumont, Roger A., "The Soviet Command Structure: The Three Headed Serpent," Signal, Journal of the Armed Forces Communications and Electronics Association, Volume 39, Number 4, Burke, Virginia, December 1984, p. 38.
- 111 Bronfenbrenner, Urie, Two Worlds of Childhood: U.S. and U.S.S.R., Touchstone Books, New York, 1974, pp. 40-46.
- 112 Lefebvre, V. A., and Smolyan, G. L., Algebra of Conflict, complete translation of Russian-language booklet, Algebra konflikta, 1968 (translation available through JPRS 52700, 1971).
- 113 Hingley, op. cit., p. 206.
- 114 Ibid., p. 108.
- 115 Ibid., p. 89.
- 116 Ibid., p. 85.
- 117 Beaumont, Roger A., Maskirovka: Soviet Camouflage, Concealment and Deception, Stratech Studies SS82-1, Center for Strategic Technology, Texas

A&M University, College Station, Texas, November, 1982, p. 36.

- 118 Hingley, Ronald, op. cit., p. 108.
- 119 Ibid., p. 98.
- 120 Berner, Wolfgang, et. al., (Eds.), The Soviet Union 1980-1981: Domestic Policy, the Economy, Foreign Policy, Volume 6, Holmes and Meier Publishers, New York, 1983, pp. 82-85.
- 121 Hingley, op. cit., p. 91.
- 122 Ibid., p. 97.
- 123 Thomas, Richard E., "Foreword," in Beaumont, Roger A., Maskirovka...(op. cit.), p. vii.
- 124 Ibid., p. 9.
- 125 Hopple, Gerald W., "Intelligence and Warning Lessons," in Watson, Bruce W., and Dunn, Peter M., Military Lessons of the Falkland Islands War: Views from the United States, Westview Press, Boulder, Colorado, 1984, p. 102.
- 126 Konev, I., Year of Victory, Progress Publishers, Moscow, 1969.
- 127 Chuikov, V. I., The End of the Third Reich, Progress Publishers, Moscow, 1978.
- 128 Beaumont, R. A., op. cit., p. 20.
- 129 Beaumont, Roger A., Horizontal Escalation: Patterns and Paradoxes, Stratech Studies SS83-1, Center for Strategic Technology, Texas A&M University, College Station, Texas, April, 1983, pp.51-52.
- 130 Rubinstein, Alvin Z., "Western Europe," in London, Kurt, (Ed.), op. cit., p. 99.
- 131 Schapiro, Leonard, "Totalitarianism in Foreign Policy," in London, Kurt, (Ed.), op. cit., p. 13.
- 132 Ibid., p. 83.
- 133 Vinocur, John, "Insights: Intellectual Europe Changes Sides on U.S. as Hero or Ogre," International Herald Tribune, Wednesday, 16 May 1984.
- 134 Rubinstein, Alvin V., op. cit., p. 103.
- 135 Triska, et. al., Pattern and Level of Risk in Soviet Foreign Policy-Making: 1945-1963, The Studies of the Communist System, Stanford University Press, 1964, p. 4.
- 136 Ibid., p. 5.

- 137 Adomeit, Hannes, op. cit.
- 138 Rubinstein, A. V., op. cit., p. 102.
- 139 Ashby, W. Ross, An Introduction to Cybernetics, Science Editions, John Wiley and Sons, Inc., New York, 1963.
- 140 Beaumont, R. A., Maskirovka...(op. cit.), pp. 30, 79.
- 141 Beaumont, R. A., "The Soviet Command Structure..."(op. cit.), p. 37.
- 142 Lefebvre, V. A., Algebra of Conflict (op. cit.), p. 45.
- 143 Druzhinin, V. A., and Kontorov, D.S., Voprosy voyennoy sistemotekhniki (Problems of Military Systems Engineering), Voenizdat, Moscow, 1976.
- 144 Lefebvre, V. A., Algebra of Conflict (op. cit.), p. 18.
- 145 Personal interview with Dr. V. A. Lefebvre, Naval Postgraduate School, 12 September 1984.
- 146 Lefebvre, V. A., Reflexive Control... (op. cit.), pp. 144-145.
- 147 Lefebvre, V. A., Algebra of Conflict (op. cit.), p. 34.
- 148 Ozernoy, Vladimir M., in a lecture on "Operations Research in the U.S.S.R.," Naval Postgraduate School, Monterey, California, 19 September 1984.
- 149 Ashby, W. Ross, op. cit., p. 35.
- 150 Wentzel, Elena S. Operations Research: A Methodological Approach, Mir Publishers, Moscow, 1983 (translated by Michael G. Edelev).
- 151 Lefebvre, V. A., Reflexive Control... (op. cit.), pp. 5-31.
- 152 Druzhinin, V. A., and Kontorov, D. S., Problems of Military Systems Engineering (op. cit.), pp. 334-348.
- 153 Arendt, Hannah, The Origins of Totalitarianism, Harcourt Brace and Company, New York, 1951.
- 154 Galbraith, John Kenneth, The Anatomy of Power, Houghton, Mifflin Publishers, Boston, 1983.
- 155 Raven, B. H., and Kruglanski, A. W., op. cit.
- 156 Targ, Russell, and Harary, Keith, The Mind Race: Understanding and Using Psychic Abilities, (epitogue by Larissa Vitenskaya), Villard Books, New York, 1984, p. 9.
- 157 Knorr, Klaus, and Morgan, Patrick (Eds.), Strategic Military Surprise: Incentives and Opportunities, Transaction Books, New Brunswick, New Jersey, 1983, pp. 190-191.

## REFERENCES

- \_\_\_\_\_, International Terrorism and the CIA: Documents, Eyewitness Reports, Facts, Progress Publishers, Moscow, 1983.
- \_\_\_\_\_, Whence the Threat to Peace, 3rd Edition, Military Publishing House (Voenizdat), Moscow, 1984.
- Adomeit, Hannes, Soviet Risk-Taking and Crisis Behavior, George Allen and Unwin, London, 1982.
- Arendt, Hannah, The Origins of Totalitarianism, Harcourt Brace and Company, New York, 1951.
- Ashby, Eric, Scientist in Russia, Penguin Books,
- Ashby, W. Ross, An Introduction to Cybernetics, Science Editions, John Wiley and Sons, Inc., New York, 1956.
- Bathurst, Robert B., "On Creating an Enemy," Naval War College Review, Vol. 34, Number 6.
- Beaumont, Roger A., Horizontal Escalation: Patterns and Paradoxes, Stratech Studies SS83-1, Center for Strategic Technology, Texas A&M University, College Station, Texas, April 1983.
- Beaumont, Roger A., Maskirovka: Soviet Camouflage, Concealment, and Deception, Stratech Studies SS82-1, Center for Strategic Technology, Texas A&M University, College Station, Texas, November 1982.
- Beaumont, Roger A., "The Soviet Command Structure: The Three-Headed Serpent," Signal, Journal of the Armed Forces Communications and Electronics Association, Burke, Virginia, Vol. 39, Number 4, December 1984.
- Berdiaev, Nikolai A., The Origin of Russian Communism, London, 1937.
- Berner, Wolfgang, et. al., (Eds.), The Soviet Union 1980-1981: Domestic Policy, The Economy, Foreign Policy, Volume 6, Holmes and Meier Publishers, New York, 1983.
- Bertram, Christoph, Prospects of Soviet Power in the 1980s, Archon Books, London, 1980.
- Boguslavsky, B. M., et. al., ABC of Dialectical and Historical Materialism, Progress Publishers, Moscow, 1975.
- Bouscaren, Anthony T., Imperial Communism, Public Affairs Press, Washington, D. C., 1953.
- Brehm, Jack W., and Cohen, Arthur R., Explorations in Cognitive Dissonance, John Wiley and Sons, Inc., New York, 1962.



- Bronfrenbrenner, Urie, Two Worlds of Childhood: U.S. and U.S.S.R., Touchstone Books, New York, 1974.
- Burhans, William A., "Opposing Views: Radar Wars, Part I and Part II," Journal of Electronic Defense, Arlington, Virginia, October/November 1983.
- Buslenko, N. P., Modelirovaniye slozhnykh sistem (Modeling of Complex Systems), Nauka, Moscow, 1968.
- Byely, B. (Col.ret.), et. al., Marxism-Leninism: On War and Army, Progress Publishers, Moscow, 1972.
- Chepikov, I., The Integration of Science, Progress Publishers, Moscow, 1978.
- Chuikov, V. I. (Marshal of the Soviet Union), The End of the Third Reich, Progress Publishers, Moscow, 1978.
- Clews, John C., Communist Propaganda Techniques, Frederick A. Praeger, Publishers, New York, 1964.
- Collins, John M., Grand Strategy: Principles and Practices, Naval Institute Press, Annapolis, Maryland, 1973.
- Crozier, Brian, (Ed.), The Peace and Strategy of the Soviet Union, Institute for the Study of Conflict, London, 1973.
- Daniel, Donald C., and Herbig, Katherine L., Strategic Military Deception, Pergamon Press, New York, 1982.
- DeGeorge, Richard T., Patterns of Soviet Thought, The University of Michigan Press, Ann Arbor, Michigan, 1966.
- Druzhinin, V. V., and Kontorov, D. S., Ideya, algoritm, resheniye (Concept, Algorithm, Decision), Voenizdat, Moscow (translation available from U.S. Government Printing Office, 1975).
- Druzhinin, V. V., and Kontorov, D. S., Voprosy voyennoy sistemotekhniki (Problems of Military Systems Engineering), Voenizdat, Moscow, 1976.
- Fehrenbach, T. R., This Kind of War, Korea: A Study in Unpreparedness, The MacMillan Company, New York, 1963.
- Fromm, Erich, Escape from Freedom, Holt, Rinehart, and Winston, New York, 1948.
- Galbraith, John Kenneth, The Anatomy of Power, Houghton, Mifflin Publishers, Boston, 1983.
- Gibert, Stephen P., Soviet Images of America, Crane, Russak and Company, Inc., New York, 1977.
- Goldman, Marshall I., U.S.S.R. in Crisis: The Failure of an Economic System, W. W. Norton and Company, New York, 1983.

- Gvozdev, Y., and Alexandrov, Y., Grenada: U.S. Terrorism in Action: Documents Facts, Comments, Novosti Press Agency Publishing House, Moscow, 1983.
- Hall, Edward T., Beyond Culture, Anchor Press/Doubleday, Garden City, New York, 1976.
- Hemsley, John, Soviet Troop Control: The Role of Command Technology in the Soviet Military System, Brassey's Publishers Limited, Oxford, 1982.
- Hingley, Ronald, The Russian Mind, Charles Scribner's Sons, New York, 1977.
- Hoffman, Erik P., and Fleron, Frederic J. Jr., (Eds.), The Conduct of Soviet Foreign Policy, Aldine Publishing Company, New York, 1980.
- Homans, George C., The Nature of Social Science, Harcourt, Brace and World, Inc., New York, 1967.
- Hough, Jerry R., Soviet Leadership in Transition, The Brookings Institution, Washington, D. C., 1980.
- Jordan, Zbigniew A., The Evolution of Dialectical Materialism: A Philosophical and Sociological Analysis, MacMillan and Company Limited, London, 1967.
- Kashlev, Yuri, Information Imperialism, Novosti Press Agency Publishing House, Moscow, 1984.
- Knorr, Klaus, and Morgan, Patrick, Strategic Military Surprise: Incentives and Opportunities, Transaction Books, New Brunswick, New Jersey, 1983.
- Konev, I., Year of Victory, Progress Publishers, Moscow, 1969.
- Kubalkova, V., and Cruickshank, A. A., Marxism-Leninism and Theory of International Relations, Routledge and Kegan Paul, London, 1980.
- Labin, Suzanne, The Technique of Soviet Propaganda, United States Government Printing Office, Washington, D. C., 1960.
- Lefebvre, Vladimir A., and Smolyan, G. L., Algebra of Conflict. complete translation of Russian-language booklet Algebra konflikt, 1968 (translation available through JPRS 52700, 1971).
- Lefebvre, Vladimir A., Algebra of Conscience: A Comparative Analysis of Western and Soviet Ethical Systems, D. Reidel Publishing Company, Dordrecht, Holland, 1982.
- Lefebvre, Vladimir A., and Batchelder, William H., "The Nature of Soviet Mathematical Psychology," Journal of Mathematical Psychology, 23, 1981.
- Lefebvre, Vladimir A., and Lefebvre, Victorina D., Reflexive Control: The Soviet Concept of Influencing an Adversary's Decision Making Process, Science Applications, Inc., Englewood, Colorado, 1984.

- Lefebvre, Vladimir A., The Structure of Awareness: Toward a Symbolic Language of Human Reflexion, Sage Publications, Inc., Beverly Hills, CA, 1977.
- London, Kurt, (Ed.), The Soviet Union in World Politics, Westview Press, Boulder Colorado, 1980.
- Mager, N. H., and Katel, Jacques, Conquest Without War, A Trident Press Book, Simon and Schuster, New York, 1961.
- Marsak, Leonard M., The Rise of Science in Relation to Society, The MacMillan Company, New York, 1964.
- Mehnert, Klaus, Soviet Man and His World, Praeger Publishers, New York, 1962 (translated from the German).
- Miller, Wright, Russians as People, E. P. Dutton and Company, Inc., New York, 1961.
- Mitchell, R. Judson, Ideology of a Superpower: Contemporary Soviet Doctrine on International Relations, Stanford University, CA.: Hoover Institution Press, 1982.
- Penkovskiy, O., The Penskoviy Papers, Doubleday, New York, 1965.
- Piel, Gerard, Science in the Cause of Man, Alfred A. Knopf Publishers, New York, 1962.
- Powell, William S., and Taylor, James G., The Soviet Perspective on the Nature and Evaluation of Command and Control, Alphatech, Inc., Burlington, Massachusetts, 1983.
- Reshetar, John S. Jr., The Soviet Polity, Frederick A. Praeger, Publishers, New York, 1968.
- Revel, Jean-Francois, The Totalitarian Temptation, Doubleday and Company, Inc., Garden City, New York, 1977 (translated by David Haggood).
- Shelyag, V. V., et. al., (Eds.), Military Psychology: A Soviet View, Soviet Military Thought Series, (translated and published under the auspices of the United States Air Force), Moscow, 1972.
- Shubik, Martin, Games for Society, Business and War: Towards a Theory of Gaming, Yale University Press, New Haven, Connecticut, 1975.
- Spiro, Robert H. Jr., "'Neo-Pacifism is Anti-Peace,'" Army, January, 1984.
- Swingle, Paul, The Structure of Conflict, Academic Press, Inc., New York, 1970.
- Targ, Russell, and Harary, Keith, The Mind Race: Understanding and Using Psychological Abilities, (epilogue by Larissa Vitenskaya), Villard Books, New York, 1984.

- Taylor, James G., Initial Concept of Soviet C<sup>2</sup>, Naval Postgraduate School, Monterey, California, 1985.
- Triska, et. al., Pattern and Level of Risk in Soviet Foreign Policy-Making: 1945-1963, The Studies of the Communist System, Stanford University Press, CA, 1964.
- Tschebotarioff, Gregory P., Russia, My Native Land, McGraw-Hill Book Company, New York, 1964.
- Ulam, Adam B., Dangerous Relations: The Soviet Union in World Politics, 1970-1982, Oxford University Press, New York, 1983.
- Vakar, Nicholas P., The Taproot of Soviet Society, Harper and Brothers, Publishers, New York, 1961.
- Vinocur, John, "Insights: Intellectual Europe Changes Sides on U.S. as Hero or Ogre," International Herald Tribune, Wednesday, May 16, 1984.
- Watson, Bruce W., and Dunn, Peter M., Military Lessons of the Falkland Islands War: Views from the United States, Westview Press, Boulder, Colorado, 1984.
- Wentzel, Elena S., Operations Research: A Methodological Approach, Mir Publishers, Moscow, 1983 (translated by Michael G. Edelev).
- Wildavsky, Aaron, (Ed.), Beyond Containment: Alternative American Policies Toward the Soviet Union, Institute for Contemporary Studies Press, San Francisco, California, 1983.

APPENDIX A.  
SUPPLEMENTAL INFORMATION

(1) Leonard Schapiro makes the important point that over a period of 20 years or so, a combination of propaganda, some intimidation, and skillful foreign policy leadership has enabled the U.S.S.R. to consolidate a "socialist gain." He states in particular that Western perceptions of threat in the 1960s and 1970s has been far less than in the 1940s and 1950s, notwithstanding evidence which should have led to a different conclusion (see page 68). One must speculate whether such a widespread misperception could possibly be the result of some form of reflexive control on the Western cognitive arena. [in London, Kurt, (Ed.), op. cit., pp. 14, 83].

Beaumont also addresses this subject when he states:

Within the logic of maskirovka, the Soviet threat, long visible, has not come to a crescendo, in spite of small hot wars, espionage, propaganda, and sabotage, nor will it. Therefore, it becomes accepted by many that part, or most, or all of the threat is in the eye of the beholder, or that there is no threat, or that a clear decision or major clash may never come, as it was with the Catholic-Protestant Wars. Such an extreme extrapolation of the logic of maskirovka conforms to the Leninist aphorism about lulling the bourgeoisie and smashing with a clenched fist at the maximum moment of relaxation; but if the mill grinds on, successfully, such a blow might never be needed. One could, after all, have a struggle in which loss would only be seen in hindsight or in which it would never be seen or felt. [Maskirovka..., p. 33].

In professing the desire to avoid warfare between the two superpowers, Mikhail Gorbachev (as well as Ronald Reagan) has been seen on American television expressing the hope that, "if our youth meet, let it be on the playing field instead of on the battlefield." (advertisement for the Goodwill Games, July 1986)

(2) Penkovskiy's anecdote runs as follows:

One thing must be clearly understood. If someone were to hand to an American general, an English general, and a Soviet general the same set of objective facts and scientific data, with instructions that these facts and data must be accepted as unimpeachable, and an analysis made and conclusions drawn on the basis of them, it is possible that the American and the Englishman would reach similar conclusions--I don't know. But the Soviet general would arrive at conclusions which would be radically different from the other two. This is because, first of all, he begins from a completely different set of basic premises and preconceived ideas, namely, the Marxian concepts of the structure of society and the course of history. Second, the logical process in his mind is totally unlike that of his Western counterparts, because he uses Marxist dialectics, whereas they will use some form of deductive reasoning. Third, a different set of moral laws governs and restricts the behavior of the Soviet. Fourth, the Soviet general's aims will be radically different from those of the American and the Englishman.

(3) In Fehrenbach's study of the Korean War, he highlights the effectiveness of "external symmetry" when discussing the great success of Korean brainwashing techniques used against American Prisoners of War. This method involved the use of highly skilled Korean propaganda agents who were chosen and trained specifically for the task of winning the "hearts and minds" of the American POWs (primarily captured Air Force officers). These agents presented themselves to the prisoners possessing an excellent, accentless and virtually faultless command of the English language; as well as a solid grounding in American history and culture. They were able to quote verbatim from the Declaration of Independence and the Constitution; all the while pointing out the shortcomings of the reality of American society and the corruption and injustice inherent in the capitalist system of government. By presenting this image of similarity and by discussing issues using the prisoners' own terms of reference and cognitive framework, the propaganda agents were able to lower the prisoners' resistance to mind control processes and were extremely successful in attaining their goal of inducing submissiveness and even gaining converts to their cause. This, in spite of the fact that the majority of prisoners had undergone training in proper conduct for prisoners of war. [Fehrenbach, op. cit., pp. 180-214].

(4) To cite an example: even prior to the advent of detente, in July 1951 (during the height of the Korean War) the Soviets introduced an English language publication entitled, News. In this journal, the "peace" policy was given full play specifically for the English speaking audience, the theme being that peaceful coexistence between the Soviet and Western worlds was possible if only the U.S. would abandon its warmongering, get out of Korea, and recognize Communist China. A strenuous, and markedly successful, effort was made to appeal to the "peace at any price" advocates in the West, and to amplify the timid yet building pressure on the U.S. government to make every necessary concession to the communists in order to "keep the peace." [Bouscaren, op. cit., p. 36].

(5) The "Tartar Yoke" refers to that period in history characterized by the invasions of Russia by Mongol-Tartars, beginning in 1223 and ending with the sack of Kiev in 1240. From this time until approximately 1480 when Ivan III and other Russian rulers finally rid themselves of Tartar rule and became masters of their own principalities, the Tartar khans served as overlords of the Russian people. They ruled in such an excessively bloodthirsty and arbitrary, unpredictable manner that to this day the words 'Mongol-Tartar rule' elicit an image of brutality and ruthlessness. [Collier's Encyclopedia, 1983, Vol. 20, p. 282].

(6) It is interesting to note that the poster on truthfulness contains a portrait of Pioneer Pavlik Morozov. During the period of collectivization, Pavlik denounced his own father as a collaborator with the Kulaks; testified against him in court leading to his father being sentenced to death; and was subsequently killed by the people of the village to avenge his father's death. He is now considered a martyr in the cause of communism, and is revered for his high ethical principles (Bronfenbrenner, *op. cit.*, p. 47). This can be seen as a vivid example of the second ethical system at work. As Lefebvre has stated, "...a compromise (between good and evil) as reflected in the devotion to communism at the price of renouncing one's father is evaluated positively." [Algebra of Conscience, p. 85].

(7) Hingley has pinpointed a very successful and effective technique used by the Soviets to further this perception of freedom. He states:

Aware as they are of Western urges to exaggerate Soviet liberalization, and realizing that it is in their interests to foster the erroneous impression that Russia is moving toward the "Western way of life" (and therefore constitutes far less of a menace than might otherwise be supposed), the Moscow authorities have been known to make use of their own licensed liberals. These are sanctioned to tour foreign countries demonstrating that the Russians, too, are human beings possessing the usual complement of eyes, ears and limbs, and that they are capable of baring their teeth in the rictus of simulated benevolence: all of which purportedly proves that their 'system,' contrary to the claims of ill-wishers, does tolerate political opposition....To say this is not at all to suggest that such licensed liberals are insincere when they express their views, merely that the authorities appear to tolerate or approve their activities as a device for further bemusing the Western brain already so pathetically ill-adapted to assess the non-Western brain. Licensed liberals in the above sense are a relatively new phenomenon, for such refinements in public relations were beyond the range of the imperial Russian government....

The Soviet authorities derive considerable propaganda advantages from permitting dissidence to continue, inasmuch as the befogged Western folk brain has long insisted on interpreting the phenomenon as proof of that blessed progressive 'liberalization' of the U.S.S.R. which, it is wishfully expected, will one day deliver the world from all its problems. In a sense, then, the West has tended to feel that it can lie back and relax so long as Russia maintains these dissidents whose 'movement' will one day peacefully transform the Kremlin into a source of international sweetness and light. [Hingley, *op. cit.*, p. 253].

He goes on to add that Soviet dissidents themselves are very distressed by these trends which serve to undermine their heartfelt efforts to bring about real changes in the system:

Both (Solzhenitsyn and Sakharov) have taken issue with Western politicians and Western public opinion for ignoring the menace of

the U.S.S.R. as an aggressive terroristic bureaucracy, and for being willing to play the "peaceful coexistence" game by Russian rules. In particular the policy of detente--that whereby Western states make tangible concessions to Moscow in return for soothing but meaningless and unenforceable assurances--has incurred the criticism of both. [Hingley, op. cit., p. 257].

(8) Many observers and writers, including Dostoyevsky who is considered a great Russian patriot, have played a major role in reinforcing this view of the Russian as a liar. The following statements provide representative samples: "Russians simulate good will only in order to exploit another's benevolence for their own purposes," and, "Among our Russian intellectual classes the very existence of a non-liar is an impossibility, the reason being that in Russia even honest men can lie." [Hingley, op. cit., p. 105].

(9) Robert H. Spiro Jr. is one analyst among others who, contrary to the general consensus of belief, feels that the Soviet role in terms of influencing Western public opinion is both active and highly conscious. He states for example:

The operational deployment of cruise and Pershing II missiles is under way, despite frantic Soviet resistance. Its opposition ranges from ominous threats of counterdeployment in Warsaw Pact countries to waging massive propaganda campaigns in Western Europe to persuade parliaments and populations that U.S. deployment is war-mongering, provocative and irresponsible. Yet, the Soviet buildup of SS 20 missiles deployed against the West since 1979 has almost trebled--from 126 to 360.

Regrettably, a sizable minority among people in NATO countries has, for a variety of reasons, fallen for the Soviet line and drifted into a modern version of traditional pacifism, which may properly be styled "neo-pacifism"...The greatest problem faced by the neo-pacifists is that their strongest ally...is the Soviet Union, openly committed to a campaign of manipulation and disinformation. [Spiro, op. cit., pp. 14-15].



# DISTRIBUTION LIST

	NO. OF COPIES
Library (Code 0142) Naval Postgraduate School Monterey, CA 93943-5000	2
Library (Code 55) Naval Postgraduate School Monterey, CA 93943-5000	1
Office of Research Administration (Code 012) Naval Postgraduate School Monterey, CA 93943-5000	1
Diane Chotikul 2024B Brown Drive Kailua, HI 96734	2
Director, C <sup>3</sup> CM Joint Test Force (Major Paul Bross) Kirtland Air Force Base, NM 87117	10
LTC Marchman F. Perry (Code 55Pj) Naval Postgraduate School Monterey, CA 93943-5000	1
Professor Michael G. Sovereign (Code 55Sm) Naval Postgraduate School Monterey, CA 93943-5000	1
Professor James G. Taylor (Code 55Tw) Naval Postgraduate School Monterey, CA 93943-5000	20
Patricia A. McEvoy-Jamil (Code 55) Naval Postgraduate School Monterey, CA 93943-5000	1

# DISTRIBUTION LIST

	NO. OF COPIES
LCDR Paul Fischbeck (Code 55Fb) Naval Postgraduate School Monterey, CA 93943-5000	1
CDR Charles W. Hutchins (Code 55Hu) Naval Postgraduate School Monterey, CA 93943-5000	1
Professor Brian G. Dailey (Code 56Di) Naval Postgraduate School Monterey, CA 93943-5000	1
LCDR Norm Green (Code 56Gn) Naval Postgraduate School Monterey, CA 93943-5000	1
Commanding Officer Wright-Patterson Air Force Base, OH 45433-6508 ATTN: Headquarters, FTD/TQFO (Dr. Daniel Howland)	5
Department of the Army Office of Deputy Chief of Staff for Operations and Plans Technical Advisor's Office, ATTN: Pete Paternoster Pentagon, Room 3A538 Washington, D.C. 20301	1
Neal Siebert Headquarters, Department of the Army ATTN: DAMI-FIT-RT, Pentagon Washington, D.C. 20310-1001	1
Bob Gerber 6060 Haverhill Court Springfield, VA 22152	1

# DISTRIBUTION LIST

	NO. OF COPIES
Raymond Rich 12912 Tamarack Silver Spring, MD 20904	1
William D. Toomey (Retired Foreign Service Officer) 51 Port Tack, Palmetto Dunes Hilton Head, S.C. 29928	2
Director, National Security Agency ATTN: Dan Steeples - Ro6 9800 Savage Road Fort Meade, MD 20755-6000	1
Director, National Security Agency ATTN: A213, Ronald Tekel 9800 Savage Road Fort Meade, MD 20755-6000	1
Defense Technical Information Center Cameron Station Alexandria, VA 22314	2
Center for Naval Analyses 2000 Beauregard Street Alexandria, VA 22311	1
Operations Research Center, Room E40-164 Massachusetts Institute of Technology ATTN: R. C. Larson and J. F. Shapiro Cambridge, MA 02139	1